GULFLAND
11-28-41 amer
out
U.S. COAST GUARD

W1188-0065

S/s. "Gulfland"

New York. Shipbuilding Corp.
No 189.

PROFILE & DECKS

Phl. Rpt. No 2883

RETAIN

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Lloyd's Register
Foundation

NEW YORK SHIPBUILDING CORP.
CAMDEN, N. J., U. S. A.,
BLUE PRINT ROOM
Print No. 10
Made JUN 19 1918
For Dept. LLOYDS

W1188-0065

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S.S. GULFLAND

New York S.B. Corp 189.
Phl. Rpt 2883.

CAPACITIES OF CARGO OIL TANKS MEASURED DOWN FROM UNDER SIDE OF HATCH COVER IN 42 GALLON BARRELS

DISTANCE DOWN	TANK No. 1		TANK No. 2		TANK No. 3		TANK No. 4		TANK No. 5		TANK No. 6.		TANK No. 7.		TANK No. 8	
	PORT	STBD.	PORT	STBD.	PORT	STBD.	PORT	STBD	PORT	STBD.	PORT	STBD.	PORT	STBD.	PORT	STBD.
1	3181.7	3172.2	3162.5	3169.8	3253.9	3243.2	3194.3	3203.2	3163.9	3155.5	3131.4	3141.5	3139.4	3131.5	3129.4	3138.5
2	3141.7	3132.3	3122.6	3129.8	3204.2	3193.7	3144.8	3153.5	3114.2	3106.0	3081.9	3091.8	3089.7	3082.0	3079.9	3088.8
3	3081.0	3071.8	3062.1	3069.1	3154.9	3144.5	3095.6	3104.2	3064.9	3056.8	3032.7	3042.5	3040.4	3032.8	3030.7	3039.5
4	3020.5	3011.4	3001.7	3008.6	3101.3	3091.0	3042.1	3050.6	3011.3	3003.3	2979.2	2988.9	2986.8	2979.3	2977.2	2985.9
5	2959.8	2951.0	2941.3	2947.9	3041.0	3030.8	2981.9	2990.3	2951.0	2943.1	2919.0	2928.5	2926.5	2919.1	2917.0	2925.6
6	2899.3	2890.6	2880.9	2887.4	2980.3	2970.4	2921.5	2929.6	2890.3	2882.7	2858.6	2867.9	2865.8	2858.7	2856.6	2864.9
7	2838.7	2830.2	2820.5	2826.8	2919.8	2910.0	2861.1	2869.1	2829.8	2822.3	2798.2	2807.4	2805.3	2798.3	2796.2	2804.4
8	2778.1	2769.8	2760.1	2766.2	2859.1	2849.5	2800.6	2808.4	2769.1	2761.8	2737.7	2746.7	2744.6	2737.8	2735.7	2743.7
TRUNK ENDS 8'-10½"	2725.2	2717.0	2707.3	2713.3												
9	2723.7	2715.5	2706.8	2711.8	2798.5	2789.1	2740.2	2747.8	2708.5	2701.4	2677.3	2686.1	2684.0	2677.4	2675.3	2683.1
10	2658.3	2650.2	2645.0	2650.8	2737.9	2728.7	2679.8	2687.2	2647.9	2641.0	2616.9	2625.5	2623.4	2617.0	2614.9	2622.5
11	2526.7	2519.0	2531.6	2537.1	2677.3	2668.2	2619.3	2626.6	2587.3	2580.5	2556.4	2564.9	2562.8	2556.5	2554.4	2561.9
TRUNK ENDS 11'-1½"					2669.7	2660.7	2611.8	2619.0	2579.7	2573.0	2548.9	2557.3	2555.2	2549.0	2546.9	2554.3
12	2409.3	2402.0	2418.0	2423.1	2637.3	2628.7	2579.8	2586.6	2547.3	2541.0	2516.9	2524.9	2522.8	2517.0	2514.9	2521.9
13	2296.1	2289.2	2304.2	2309.0	2527.0	2518.5	2469.6	2476.3	2437.0	2430.8	2406.7	2414.6	2412.5	2406.8	2404.7	2411.6
14	2182.8	2176.3	2190.3	2194.7	2412.1	2403.9	2355.0	2361.4	2322.1	2316.2	2292.1	2299.7	2297.6	2292.2	2290.1	2296.7
15	2069.6	2063.4	2076.2	2080.2	2297.2	2289.4	2240.5	2246.5	2207.2	2201.7	2177.6	2184.8	2182.7	2177.7	2175.6	2181.8
16	1956.5	1950.7	1961.9	1965.5	2182.3	2174.8	2125.9	2131.6	2092.3	2087.1	2063.0	2069.9	2067.8	2063.1	2061.0	2066.9
17	1843.4	1838.0	1847.4	1850.6	2067.4	2060.3	2011.4	2016.7	1977.4	1972.6	1948.5	1955.0	1952.9	1948.6	1946.5	1952.0
18	1730.4	1725.3	1732.7	1735.6	1952.4	1945.7	1896.8	1901.7	1862.4	1858.0	1833.9	1840.0	1837.9	1834.0	1831.9	1837.0
19	1617.5	1612.8	1618.1	1620.6	1837.6	1831.3	1782.4	1786.9	1747.6	1743.6	1719.5	1725.2	1723.1	1719.6	1717.5	1722.2
20	1504.6	1500.3	1503.5	1505.5	1722.6	1716.6	1667.7	1671.9	1632.6	1628.9	1604.8	1610.2	1608.1	1604.9	1602.8	1607.2
21	1391.7	1387.8	1388.7	1390.5	1607.8	1602.0	1553.1	[illegible]	1517.8	1514.3	1490.2	1495.4	1493.3	1490.3	1488.2	1492.4
22	1279.0	1275.4	1274.1	1275.4	1492.8	1487.5	1438.6	1442.1	1402.8	1399.8	1375.7	1380.4	1378.3	1375.8	1373.7	1377.4
23	1166.3	1163.1	1159.4	1160.4	1377.8	1372.6	1323.7	1327.1	1287.8	1284.9	1260.8	1265.4	1263.3	1260.9	1258.8	1262.4
24	1053.5	1050.7	1044.8	1045.4	1262.9	1258.3	1209.4	1212.2	1172.9	1170.6	1146.5	1150.5	1148.4	1146.6	1144.5	1147.5
25	940.8	938.4	930.1	930.3	1148.0	1143.8	1094.9	1097.3	1058.0	1056.1	1032.0	1035.6	1033.5	1032.1	1030.0	1032.6
26	828.3	826.2	815.9	815.7	1033.1	1029.2	980.3	982.4	943.1	941.5	917.4	920.7	918.6	917.5	915.4	917.7
27	715.8	714.1	701.9	701.4	918.2	914.7	865.7	867.4	828.2	827.0	802.9	805.8	803.7	803.0	800.9	802.8
28	603.8	602.4	588.4	587.6	803.8	800.7	751.1	752.5	713.3	712.4	689.4	692.0	688.8	688.4	689.4	689.0
29	492.8	491.7	475.9	475.1	689.1	686.3	636.6	637.6	599.4	597.9	576.8	579.0	575.0	575.0	574.8	576.0
30	381.8	381.0	364.8	363.5	577.9	575.6	522.0	522.7	484.5	484.5	465.1	467.0	462.0	462.4	463.1	464.0
31	276.7	276.7	257.5	257.5	466.8	464.7	407.5	407.8	372.5	372.7	354.3	355.8	350.8	351.5	352.3	352.8
32	180.8	180.7	157.7	157.5	357.4	355.6	295.8	295.7	267.8	267.5	249.5	249.8	246.9	246.6	249.5	249.8
33	95.8	95.8	69.1	69.1	253.5	252.2	192.2	192.5	165.4	165.2	150.8	151.0	148.2	148.0	150.8	151.0
34	21.6	21.7			151.9	151.8	93.9	94.5	70.6	70.5	58.8	58.9	56.9	56.8	58.8	58.9
35					58.0	57.4	8.5	8.4								
BOTTOM DEPTH	34'-4"	34'-4"	33'-10⅞"	33'-10⅞"	35'-9½"	35'-9½"	35'-1"	35'-1"	34'-10⅞"	34'-10⅞"	34'-8⅝"	34'-8⅝"	34'-8⅛"	34'-8⅛"	34'-9¼"	34'-9¼"

CARGO OIL SUMMARY	PORT.	ST'B'D.
CARGO OIL TANK No. 1.	3186.7	3177.2
" " " No. 2.	3167.5	3174.8
" " " No. 3.	3275.6	3264.9
" " " No. 4.	3216.0	3224.9
" " " No. 5.	3185.6	3177.2
" " " No. 6.	3153.1	3163.2
" " " No. 7.	3161.1	3153.2
" " " No. 8.	3151.1	3160.2
WING TANK No. 2.	800.4	800.4
" " No. 3.	800.4	800.4
" " No. 4.	557.9	557.9
CARGO OIL 42 GAL. BBLS.	27,655.4	27,654.3
TOTAL CARGO OIL	55,309.7	

FUEL OIL SUMMARY	PORT.	STBD.
FORWARD TANK	1056.9	1056.9
AFTER TANK	1338.0	1338.0
FUEL OIL 42 GAL. BBLS.	2394.9	2394.9
TOTAL FUEL OIL	4789.8	

CAPACITY OF FUEL OIL TANKS MEASURED DOWN FROM UNDER SIDE OF HATCH COVER IN 42 GAL. BBLS.

DISTANCE DOWN	FORWARD TANK.		AFTER TANK	
	PORT	ST'B'D.	PORT	ST'B'D.
0	1056.9	1056.9	1338.0	1338.0
1	1052.4	1052.4	1328.1	1328.1
2	1039.1	1039.1	1312.3	1312.3
3	1019.3	1019.3	1295.8	1295.8
4	998.8	998.8	1276.7	1276.7
5	978.3	978.3	1240.7	1240.7
6	958.0	958.0	1199.5	1199.5
7	937.7	937.7	1160.1	1160.1
8	917.2	917.2	1116.1	1116.1
TRUNK ENDS 8'-10½"	899.2	899.2		
9	896.6	896.6	1074.0	1074.0
10	869.6	869.6	1031.0	1031.0
11	825.5	825.5	988.1	988.1
TRUNK ENDS 11'-1½"				
12	791.1	791.1	944.8	944.8
13	754.8	754.8	901.6	901.6
14	718.4	718.4	858.5	858.5
15	681.9	681.9	815.2	815.2
16	645.5	645.5	772.0	772.0
17	609.0	609.0	728.7	728.7
18	572.6	572.6	685.6	685.6
19	536.0	536.0	642.3	642.3
20	499.7	499.7	599.1	599.1
21	463.0	463.0	555.8	555.8
22	426.4	426.4	512.7	512.7
23	389.7	389.7	469.4	469.4
24	353.2	353.2	426.2	426.2
25	316.4	316.4	382.9	382.9
26	279.9	279.9	339.8	339.8
27	243.2	243.2	296.5	296.5
28	206.6	206.6	253.3	253.3
29	171.3	171.3	210.0	210.0
30	137.1	137.1	169.6	169.6
31	104.9	104.9	131.9	131.9
32	75.3	75.3	95.2	95.2
33	48.3	48.3	60.3	60.3
34	22.9	22.9	25.9	25.9
35	1.5	1.5	2.7	2.7
TOTAL DEPTH	35'-0⅛"	35'-0⅛"	35'-0½"	35'-0½"

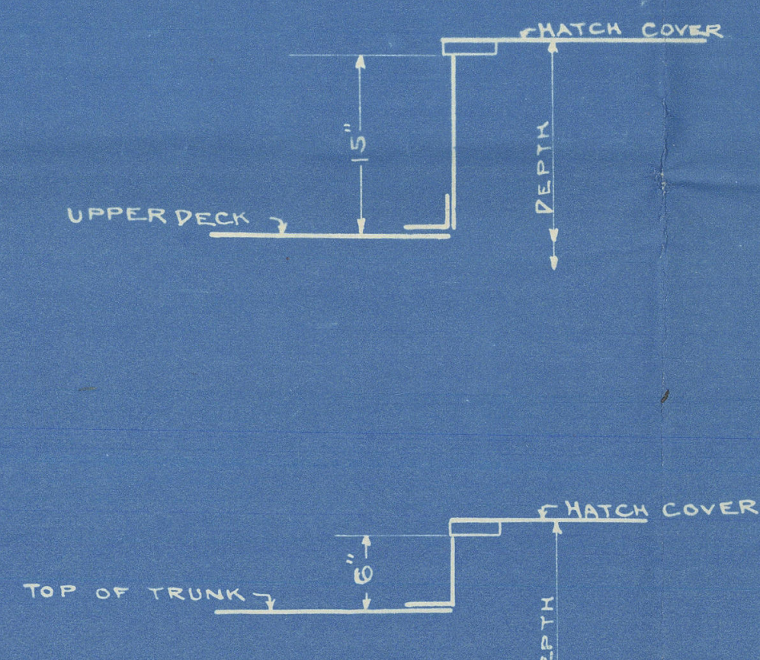
GENERAL CARGO.	CUBIC FEET
HOLD	13034
LOWER TWEEN DKS.	14925
MAIN " "	8048
WING COMP'T. No. 1	12578
" " No. 2	8980
" " No. 3	8980
" " No. 4	6260
TOTAL	72805

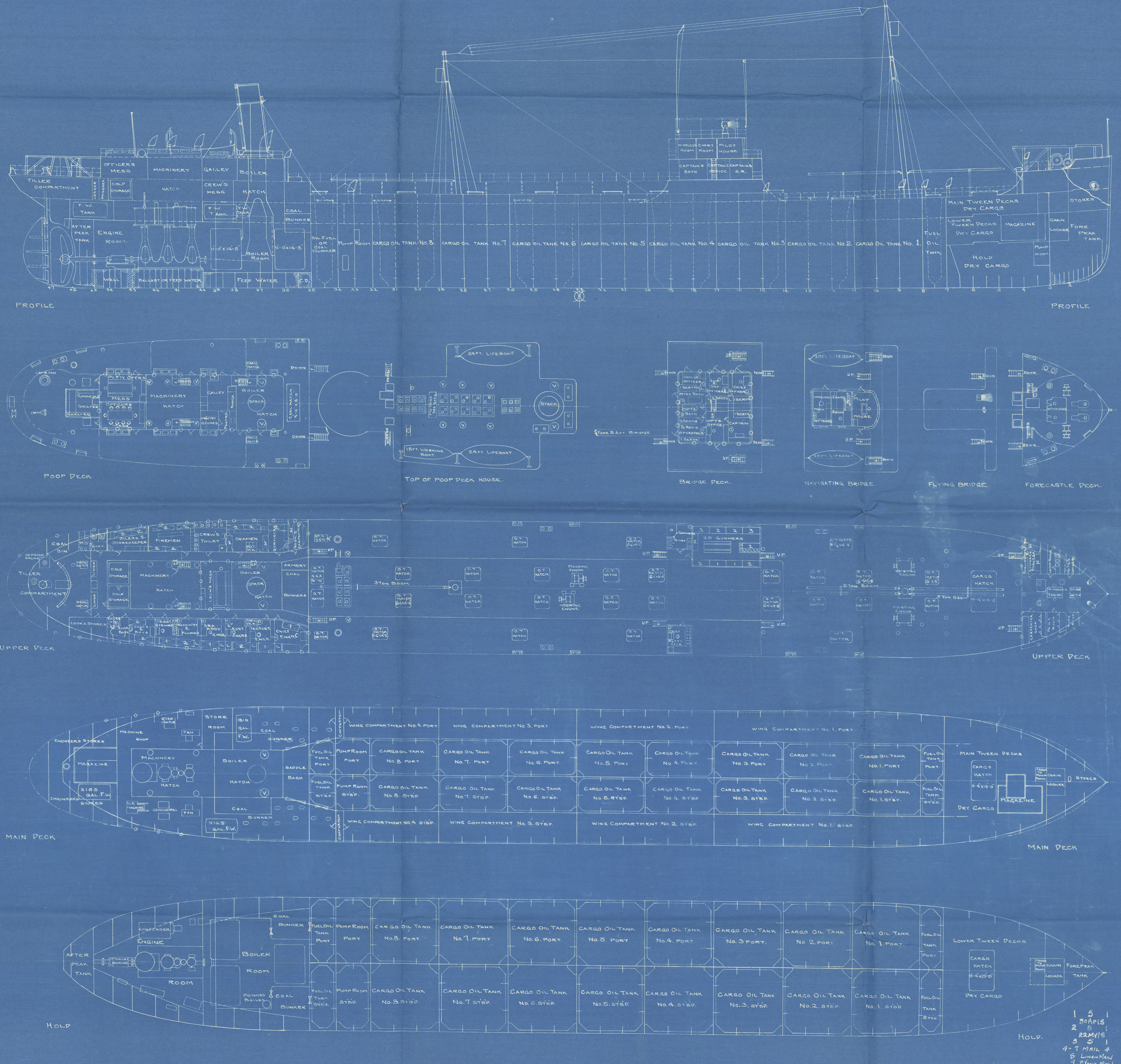
COAL	TONS, 43 CU. FT.
HOLD BUNKERS (WING)	284.2
WING	176.1
POOP	39.2
ATHWARTSHIP (HOLD)	330.4
WING COMPARTMENT No. 4.	145.6
TOTAL	975.5

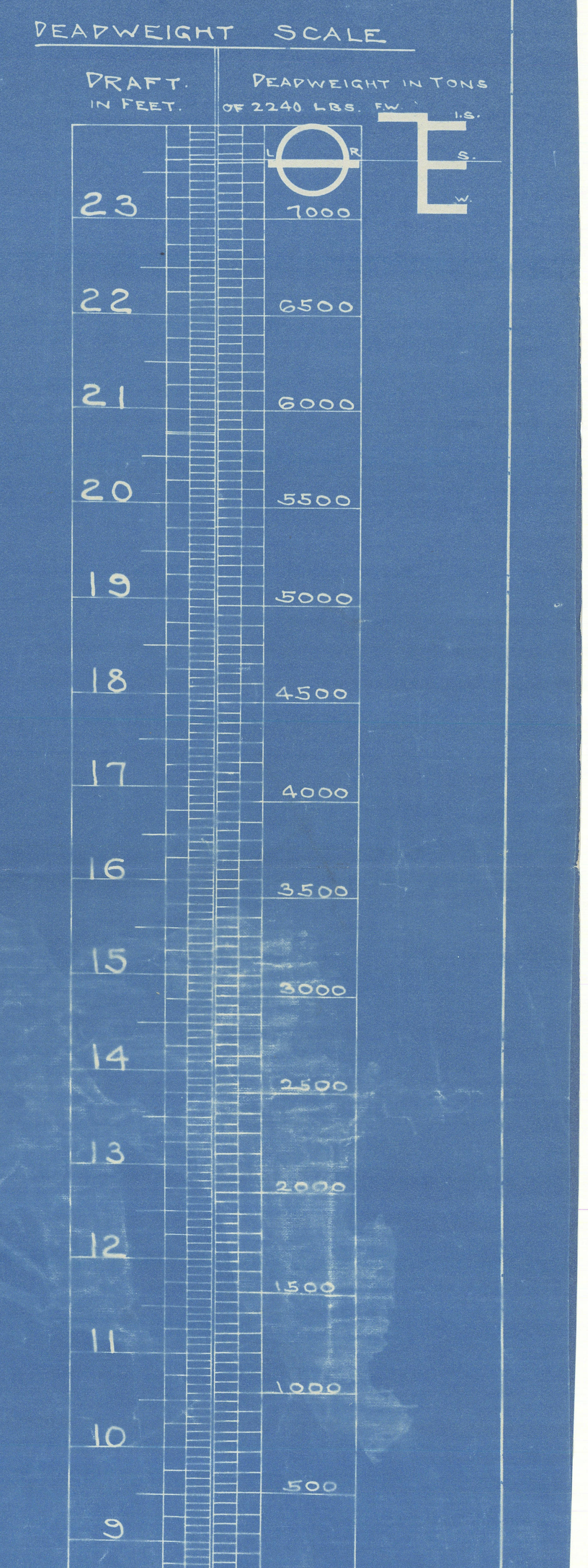
GEN'L. DIMENSIONS	
LENGTH OVERALL	406'-6½"
" BET. PERP'S.	391'-7"
BEAM, MOLDED.	51'-0"
DEPTH TO UPPER DK., MLD.	30'-2"
GROSS TONNAGE	
NET TONNAGE	

FRESH WATER	TONS, 36 CU. FT.
FORE PEAK TANK	159.0
AFTER PEAK TANK	29.5
BOILER ROOM D'B'L. BOTTOM	146.0
ENGINE " " "	75.7
WING COFFERDAM P. & S.	14.6
DWARF "	24.4
TOTAL	449.2
DRINKING WATER	GALLONS.
3 TANKS ON MAIN DECK	6140
DAILY SUPPLY TANK	500

NOTE:- 2148 CU. FT. DEDUCTED FROM MAIN TWEEN DECKS FOR FORWARD MAGAZINE.


HATCH COVER
UPPER DECK
DEPTH
HATCH COVER
TOP OF TRUNK
DEPTH


OFFICER'S MESS
MACHINERY
GALLEY
BOILER
TILLER COMPARTMENT
LOCKER
PASSAGE
COLD STORAGE
HATCH
CREW'S MESS
HATCH
F. W. TANK
F. W. TANK
F. W. TANK
COAL BUNKER
AFTER PEAK TANK
ENGINE ROOM.
11'-0"x14'-8"
BOILER ROOM
11'-0"x14'-8"
OIL FUEL OR COAL BUNKER
PUMP ROOM
CARGO OIL TANK No. 8.
CARGO OIL TANK No. 7
CARGO OIL TANK No. 6
CARGO OIL TANK No. 5
CARGO OIL TANK No. 4
CARGO OIL TANK No. 3
CARGO OIL TANK No. 2
CARGO OIL TANK No. 1.
FUEL OIL TANK
WELL
BALLAST OR FEED WATER
FEED WATER
C. D.
WIRELESS ROOM
CHART ROOM
PILOT HOUSE
CAPTAIN'S BATH
CAPTAIN'S OFFICE
CAPTAIN'S S.R.
MAIN TWEEN DECKS DRY CARGO
LOWER TWEEN DECKS DRY CARGO
MAGAZINE
CHAIN LOCKER
FORE PEAK TANK
STORES
PUMP ROOM
HOLD DRY CARGO
47 46 45 44 43 42 41 40 39 38 37 36 35 34 33 32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2
PROFILE
PROFILE
24 FT. LIFEBOAT
18 FT. WORKING BOAT
24 FT. LIFEBOAT
STACK
28 FT. LIFEBOAT
POOP DECK
TOP OF POOP DECK HOUSE
BRIDGE DECK
NAVIGATING BRIDGE
FLYING BRIDGE
FORECASTLE DECK
TILLER COMPARTMENT
MACHINERY HATCH
BOILER HATCH
FIREMEN
SEAMEN
BUNKERS
UPPER DECK
UPPER DECK
WING COMPARTMENT No. 4 PORT
WING COMPARTMENT No. 3 PORT
WING COMPARTMENT No. 2 PORT
WING COMPARTMENT No. 1 PORT
MACHINE SHOP
ENGINEERS STORES
MAGAZINE
STORE ROOM
MACHINERY HATCH
BOILER HATCH
COAL BUNKER
FUEL OIL TANK
PUMP ROOM
CARGO OIL TANK No. 8 PORT
CARGO OIL TANK No. 7 PORT
CARGO OIL TANK No. 6 PORT
CARGO OIL TANK No. 5 PORT
CARGO OIL TANK No. 4 PORT
CARGO OIL TANK No. 3 PORT
CARGO OIL TANK No. 2 PORT
CARGO OIL TANK No. 1 PORT
CARGO OIL TANK No. 8 STBD.
CARGO OIL TANK No. 7 STBD.
CARGO OIL TANK No. 6 STBD.
CARGO OIL TANK No. 5 STBD.
CARGO OIL TANK No. 4 STBD.
CARGO OIL TANK No. 3 STBD.
CARGO OIL TANK No. 2 STBD.
CARGO OIL TANK No. 1 STBD.
WING COMPARTMENT No. 4 STBD.
WING COMPARTMENT No. 3 STBD.
WING COMPARTMENT No. 2 STBD.
WING COMPARTMENT No. 1 STBD.
MAIN TWEEN DECKS
CARGO HATCH
MAGAZINE
DRY CARGO
MAIN DECK
MAIN DECK
AFTER PEAK TANK
ENGINE ROOM
BOILER ROOM
COAL BUNKER
LOWER TWEEN DECKS
CARGO HATCH 9'-4"x15'-0"
TRUNK TO PUMP ROOM
CHAIN LOCKER
FORE PEAK TANK
DRY CARGO
HOLD
HOLD.



1 5 1
30 Ap 18
2 5 1
22 My 18
3 5 1
4-7 Mail 4
8 Linen Mail
9 P. Yand. Mail
18 Je 18
10 Lloyd's 1
19 Je 18

GENERAL ARRANGEMENT.
& CAPACITY PLAN.

SCALE:- 1/16" = 1 FT.

MADE BY T. I. C. DATE:- 18, JE., 1918

NEW YORK SHIPBUILDING CORPORATION
CAMDEN, NEW JERSEY, U.S.A.

DR. 189-208-A

E. H. Rigg NAVAL ARCHITECT.

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S/s. "Gulfland"

New York S.B. Corp. No. 189.

MIDSHIP SECTION.

Phl. Rpt; 2883.

RETAIN

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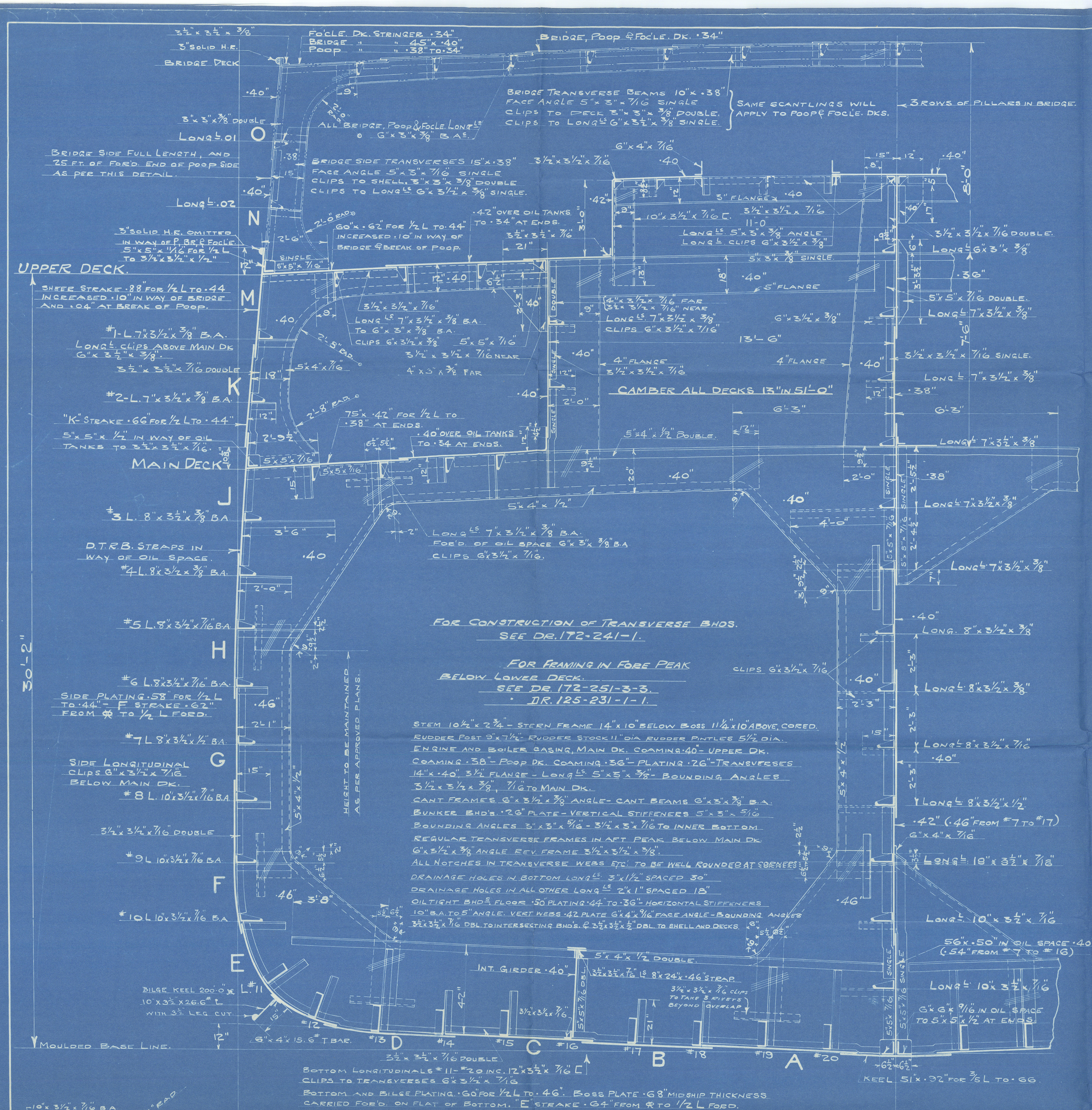
CAMDEN, N. J., U. S. A.
BLUE PRINT ROOM
Print No. JUN 19 1918
Made
For Dept.


FO'C'LE. DK. STRINGER ·34"
BRIDGE " " ·45"x·40"
POOP " " ·38" TO ·34"
BRIDGE, POOP & FO'C'LE. DK. ·34"
3½"x3½"x3/8"
3" SOLID H.R.
BRIDGE DECK
·40"
3"x3"x3/8" DOUBLE
LONGL ·01
O
ALL BRIDGE, POOP & FO'C'LE LONGLS 6"x3"x3/8" B.As.
BRIDGE SIDE FULL LENGTH, AND 25 FT. OF FOR'D. END OF POOP SIDE AS PER THIS DETAIL.
LONGL ·02
N
3" SOLID H.R. OMITTED IN WAY OF P, BR, & FO'C'LE. 5"x5"x11/16 FOR ½L TO 3½"x3½"x½"
2'-0" RAD.
2'-6"
SINGLE 5"x5"x7/16"
60"x·62" FOR ½L TO ·44" INCREASED ·10" IN WAY OF BRIDGE & BREAK OF POOP.
·42" OVER OIL TANKS TO ·34" AT ENDS.
3½"x3½"x7/16"
21"
6"x4"x7/16"
·40
3" FLANGE
10"x3½"x7/16 C.
11'-0
LONGLS 5"x3"x3/8" ANGLE
LONGL CLIPS 6"x3½"x3/8"
5"x3"x3/8" SINGLE.
5" FLANGE
·40"
13'-6"
3 ROWS OF PILLARS IN BRIDGE.
8'-0"
7'-6"
3½"x3½"x7/16 DOUBLE.
LONGL 6"x3"x3/8"
·36"
5"x5"x7/16 DOUBLE.
LONGL 7"x3½"x3/8"
UPPER DECK.
M
·40
2'-5" RAD.
3½"x3½"x7/16"
LONGLS 7"x3½"x3/8" B.A. TO 6"x3"x3/8" B.A.
CLIPS 6"x3½"x3/8"
5"x5"x7/16"
3½"x3½"x7/16 NEAR
4"x3"x3/8 FAR
4"x3½"x7/16 FAR
3½"x3½"x7/16" NEAR
LONGLS 7"x3½"x3/8"
CLIPS 6"x3½"x7/16"
6"x3½"x3/8"
5"x4"x7/16
18"
K
2'-8" RAD.
2'-9½"
75"x·42" FOR ½L TO ·38" AT ENDS.
·40" OVER OIL TANKS TO ·34 AT ENDS.
CAMBER ALL DECKS 13" IN 51'-0"
DOUBLE
SINGLE
6'-3"
5"x4"x½" DOUBLE.
5"x4"x½"
MAIN DECK
5"x5"x7/16"
J
3'-6"
LONGLS 7"x3½"x3/8" B.A.
FOR'D. OF OIL SPACE 6"x3"x3/8" B.A.
CLIPS 6"x3½"x7/16.
4'-0"
·40"
LONGL 7"x3½"x3/8"
LONGL 8"x3½"x3/8"
LONGL 8"x3½"x7/16"
LONGL 8"x3½"x½"
·42" (·46" FROM #7 TO #17)
6"x4"x7/16
LONGL 10"x3½"x7/16"
HEIGHT TO BE MAINTAINED AS PER APPROVED PLANS.
CLIPS 6"x3½"x7/16"
H
2'-1"
·46"
G
15"
5"x4"x½"
F
·46
3'-0"
E
30'-2"
INT. GIRDER ·40"
3½"x3½"x7/16" Ls 8"x24"x·46" STRAP.
3½"x3½"x7/16" CLIPS TO TAKE 3 RIVETS BEYOND OVERLAP
5"x5"x7/16 DBL.
5"x4"x½" DOUBLE.
42"
56"x·50" IN OIL SPACE ·40 AT FOR'D. END (·54" FROM #7 TO #16)
LONGL 10"x3½"x7/16
6"x6"x9/16 IN OIL SPACE TO 5"x5"x½ AT ENDS.
6"x4"x15.6# T BAR.
12"
MOULDED BASE LINE.
#11 #12 #13 #14 #15 #16 #17 #18 #19 #20
D C B A
6½" 6½"
KEEL 51"x·92" FOR 3/5 L TO ·66
25'-6"

"K"-STRAKE ·66" FOR ½L TO ·44"

5"x5"x½" IN WAY OF OIL TANKS TO 3½"x3½"x7/16".

SHEER STRAKE ·88" FOR ½L TO ·44 INCREASED ·10" IN WAY OF BRIDGE AND ·04" AT BREAK OF POOP.

#1-L. 7"x3½"x3/8" B.A.

LONGL. CLIPS ABOVE MAIN DK 6"x3½"x3/8".

3½"x3½"x7/16 DOUBLE

#2-L. 7"x3½"x3/8" B.A.

#3 L. 8"x3½"x3/8" B.A

D.T.R.B. STRAPS IN WAY OF OIL SPACE.

#4 L. 8"x3½x3/8" B.A.

#5 L. 8"x3½"x7/16 B.A.

#6 L. 8"x3½"x7/16" B.A.

SIDE PLATING ·58" FOR ½L TO ·44" – F STRAKE ·62" FROM ℄ TO ½ L FORD.

#7 L 8"x3½"x½" B.A.

SIDE LONGITUDINAL CLIPS 6"x3½"x7/16 BELOW MAIN DK.

#8 L. 10"x3½"x7/16 B.A

3½"x3½"x7/16" DOUBLE

#9 L 10"x3½"x7/16 B.A

#10 L 10"x3½"x7/16 B.A

BILGE KEEL 200'-0" L. #11 10"x3½"x26.6# L WITH 3½" LEG CUT.

BRIDGE TRANSVERSE BEAMS 10"x·38"
FACE ANGLE 5"x3"x7/16 SINGLE
CLIPS TO DECK 3"x3"x3/8" DOUBLE.
CLIPS TO LONGLS 6"x3½"x3/8" SINGLE.
SAME SCANTLINGS WILL APPLY TO POOP & FO'C'LE. DKS.

BRIDGE SIDE TRANSVERSES 15"x·38"
FACE ANGLE 5"x3"x7/16 SINGLE
CLIPS TO SHELL, 3"x3"x3/8" DOUBLE
CLIPS TO LONGLS 6"x3½"x3/8" SINGLE.

FOR CONSTRUCTION OF TRANSVERSE BHDS.
SEE DR. 172-241-1.

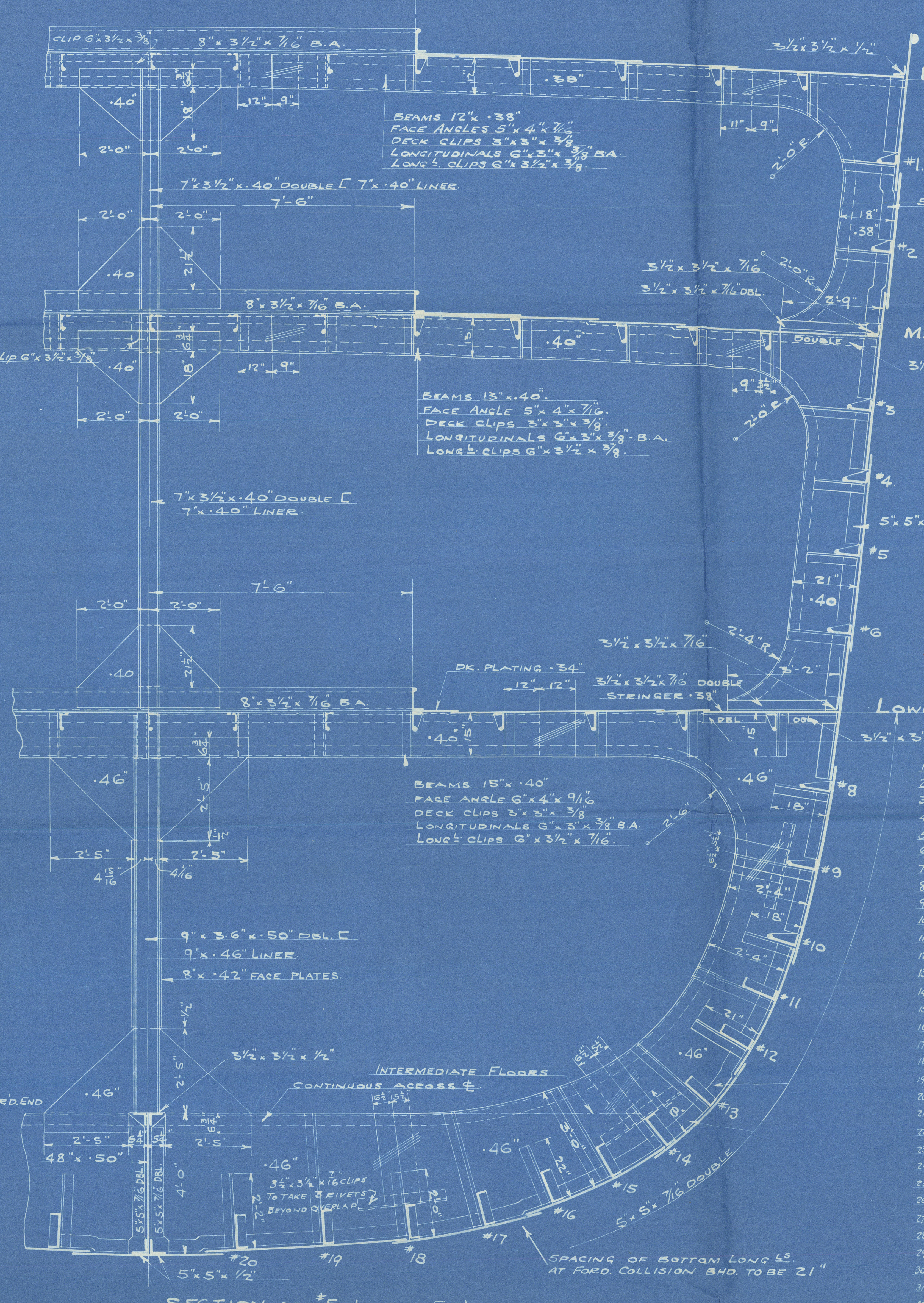
FOR FRAMING IN FORE PEAK
BELOW LOWER DECK.
SEE DR. 172-251-3-3.
· DR. 125-231-1-1.

STEM 10½"x2¾ – STERN FRAME 14"x10" BELOW BOSS 11¼"x10" ABOVE, CORED.
RUDDER POST 9"x7½" – RUDDER STOCK 11" DIA RUDDER PINTLES 5½" DIA.
ENGINE AND BOILER CASING, MAIN DK. COAMING ·40" – UPPER DK.
COAMING ·38" – POOP DK. COAMING ·36" – PLATING ·26" – TRANSVERSES
14"x·40", 3½" FLANGE – LONGLS. 5"x3"x3/8" – BOUNDING ANGLES
3½"x3½"x3/8", 7/16 TO MAIN DK.
CANT FRAMES 6"x3½"x3/8" ANGLE – CANT BEAMS 6"x3"x3/8" B.A.
BUNKER BHD'S. ·26" PLATE – VERTICAL STIFFENERS 5"x3"x5/16
BOUNDING ANGLES 3"x3"x5/16 – 3½"x3"x7/16 TO INNER BOTTOM
REGULAR TRANSVERSE FRAMES IN AFT PEAK BELOW MAIN DK.
6"x3½"x3/8" ANGLE REV. FRAME 3½"x3½"x3/8".
ALL NOTCHES IN TRANSVERSE WEBS ETC. TO BE WELL ROUNDED AT CORNERS
DRAINAGE HOLES IN BOTTOM LONGLS. 3"x1½" SPACED 30"
DRAINAGE HOLES IN ALL OTHER LONGLS. 2"x1" SPACED 18"
OILTIGHT BHDS. FLOOR ·50" PLATING ·44" TO ·36" – HORIZONTAL STIFFENERS
10" B.A. TO 5" ANGLE. VERT WEBS ·42 PLATE 6"x4"x9/16" FACE ANGLE – BOUNDING ANGLES
3½"x3½"x7/16 DBL. TO INTERSECTING BHD'S. & 3½"x3½"x½" DBL. TO SHELL AND DECKS.

3½"x3½"x7/16" DOUBLE

BOTTOM LONGITUDINALS #11 – #20 INC. 12"x3½"x7/16" C
CLIPS TO TRANSVERSES 6"x3½"x7/16

BOTTOM AND BILGE PLATING ·60" FOR ½L TO ·46". BOSS PLATE ·68" MIDSHIP THICKNESS
CARRIED FOR'D. ON FLAT OF BOTTOM. "E" STRAKE ·64" FROM ℄ TO ½L FORD.


7'-6½"
CLIP 6"x3½"x3/8"
8"x3½"x7/16" B.A.
3½"x3½"x½"
UPPER DECK.
·38"
·40
18"
12" 9"
2'-0" 2'-0"
11" 9"
2'-0" R.
#1.
5"x5"x7/16 SINGLE.
18"
·38"
#2
7"x3½"x·40" DOUBLE C 7"x·40" LINER.
7'-6"
21½"
3½"x3½"x7/16
3½"x3½"x7/16" DBL.
2'-0" R.
2'-9"
MAIN DECK
DOUBLE
3½"x3"x3/8"
·40"
clip 6"x3½"x3/8"
9" 3½"
2'-0" R.
#3
#4.
7"x3½"x·40" DOUBLE C 7"x·40" LINER.
5"x5"x7/16" SINGLE.
#5
21"
·40
#6
2'-4" R.
3'-2"
3½"x3½"x7/16"
DK. PLATING ·34"
12" 12"
3½"x3½"x7/16 DOUBLE
STRINGER ·38"
LOWER DECK
3½"x3"x3/8
DBL.
15"
·46"
#8
18"
2'-6"
2'-5" 2'-5"
4 15/16" 4 1/16"
#9
2'-4"
18"
#10
9"x3.6"x·50" DBL. C
9"x·46" LINER.
8"x·42" FACE PLATES.
#11
21"
·46"
#12
3½"x3½"x½"
INTERMEDIATE FLOORS
CONTINUOUS ACROSS ℄.
#13
3'-0"
8"
#14
22"
#15
5"x5"x7/16 DOUBLE
#16
#17
#18
#19
#20
5"x5"x½"
48"x·50"
5½" 5½"
4'-0
5"x5"x7/16 DBL.
3½"x3½"x7/16" CLIPS. TO TAKE 3 RIVETS BEYOND OVERLAP
2'-2"
2'-0"

BEAMS 12"x·38"
FACE ANGLES 5"x4"x7/16
DECK CLIPS 3"x3"x3/8
LONGITUDINALS 6"x3"x3/8" B.A.
LONGL. CLIPS 6"x3½"x3/8.

BEAMS 13"x·40".
FACE ANGLE 5"x4"x7/16.
DECK CLIPS 3"x3"x3/8".
LONGITUDINALS 6"x3"x3/8" – B.A.
LONGL. CLIPS 6"x3½"x3/8.

BEAMS 15"x·40"
FACE ANGLE 6"x4"x9/16
DECK CLIPS 3"x3"x3/8
LONGITUDINALS 6"x3"x3/8" B.A.
LONGL. CLIPS 6"x3½"x7/16.

SPACING OF BOTTOM LONGLS. AT FORD. COLLISION BHD. TO BE 21"

SECTION AT #5 LOOKING FOR'D.

DATE	APPROVED	ALTERATIONS.
22-MY-17	E.H.L.	PLAN CORRECTED TO AGREE WITH FINISHED STRUCTURAL PLANS.

LIST OF SCANTLINGS USED

SHAPE	SIZE
ANGLE	8"x3½"x7/16
"	6"x6"x9/16
"	6"x4"x9/16
"	6"x4"x7/16
"	6"x3½"x7/16
"	6"x3½"x3/8"
"	5"x5"x11/16
"	5"x5"x½"
"	5"x5"x7/16
"	5"x4"x½"
"	5"x4"x7/16
"	5"x3"x7/16
"	5"x3"x3/8"
"	5"x3"x5/16
"	4"x4"x½"
"	4"x3½"x7/16
"	3½"x3½"x½"
"	3½"x3½"x7/16
"	3½"x3½"x3/8"
"	3½"x3"x7/16
"	3½"x3"x3/8"
"	3"x3"x3/8
"	3"x3"x5/16
BULB ANGLE	10"x3½"x7/16
"	8"x3½"x½"
"	8"x3½"x7/16
"	8"x3½"x3/8
"	7"x3½"x3/8
"	6"x3"x3/8"
CHANNEL	12"x3½"x3½"x7/16"
"	9"x3.6"x3.6"x·50"
"	7"x3½"x3½"x·40"
HALF ROUND	3" SOLID.
BULB ANGLE	10"x3½x½"

S/S "Gulfland"
New York S.B. Corp. No. 189.
Phil. Rpt. No. 2883

RIVETING.

1 BUTTS OF KEEL DOUBLE Q.R.B. STRAPS 1⅛" RIVS. FOR 2/3 L TO DBL. T.R.B.
2. STRAPS 1" RIVETS AT ENDS.
3. BUTTS OF UPPER DK. SHEER STRAKE DOUBLE Q.R.B. STRAPS 1" RIVS.
4. FOR ½ L FOR'D. DBL. R.B. STRAPS 7/8" RIVS. AT ENDS.
5 BUTTS OF STRAKE BELOW SHEER Q.R.B. LAPS 1" RIVS. FOR 2/3 L TO T.R.
6 B. LAPS 7/8" RIVS. AT ENDS.
7 BUTTS OF MAIN DK. SHEER STRAKE DOUBLE T.R.B. STRAPS 7/8" RIVETS IN WAY
8 OF OIL. TO T.R.B. LAPS AT ENDS.
9 BUTTS OF BOTTOM AND BILGE Q.R.B. LAPS 7/8" RIV'S. FOR ½ L TO T.R.B. LAPS
10 AT ENDS.
11 BUTTS OF BALANCE OF SHELL T.R.B. LAPS 7/8" RIVS. (BELOW UPPER DK.)
12 SEAMS OF SHELL – KEEL TO GARBOARD D.R. 1⅛" RIVS. FOR 2/3 L TO 1" RIV'S. ENDS.
13 STRAKE BELOW SHEER D.R. 1" TO 7/8" RIV'S. – OTHER STRAKES D.R. 7/8" RIV'S.
14 BUTTS OF SHELL ABOVE UPPER DK. D.R.B. LAPS ¾" RIVS
15 SEAMS OF SHELL ABOVE UPPER DK. D.R. ¾" RIVS
16 BUTTS OF CENTRE KEELSON DOUBLE T.R.B. STRAPS 7/8" RIV'S.
17 BUTTS OF UPPER DK. STRINGER DOUBLE Q.R.B. STRAPS 1" RIV'S. FOR 2/3 L. TO
18 SINGLE T.R.B. STRAPS ¾" RIV'S. AT ENDS.
19 BUTTS OF MAIN DK. STRINGER T.R.B. LAPS ¾" RIV'S.
20 BUTTS OF LOWER DK. STRINGER D.R.B. LAPS ¾" RIV'S.
21 BUTTS OF UPPER AND LOWER DK. PLATING D.R.B. LAPS ¾" RIV'S.
22 BUTTS OF MAIN DK. PLATING IN WAY OF OIL D.R.B. STRAPS TO D.R.B. LAPS ENDS.
23 SEAMS OF MAIN AND UPPER DK. PLATING IN WAY OF OIL D.R. TO S.R. AT ENDS.
24 SEAMS OF LOWER DK. S.R. ¾" RIV'S.
25 BUTTS AND SEAMS OF TRANS. AND ℄ OIL BHDS. D.R. 7/8" RIV'S.
26. BUTTS AND SEAMS OF EXPANSION TRUNK AND BHD. D.R. ¾" RIV'S.
27 BUTTS AND SEAMS OF INNER BOTTOM IN BOILER SPACE D.R. 7/8" RIV'S.
28. BUTTS OF INNER BOTTOM IN ENGINE SPACE D.R.B. STRAPS 1⅛" RIV'S.
29. SEAMS IN ENGINE SPACE D.R. 1⅛" RIV'S.
30 BUTTS OF POOP, BRIDGE AND FO'C'LE. DK. STRINGER AND POOP DK. PLATING
31 D.R.B. LAPS ¾" RIV'S.
32. BUTTS OF BRIDGE DK. PLATING S.R.B. LAPS ¾" RIV'S.
33 SEAMS OF POOP, BRIDGE AND FO'C'LE. DK. PLATING S.R. ¾" RIV'S.
34. RIVETS BET. TRANSVERSES AND SHELL, MAIN AND UPPER DK. ℄ BHD. 7/8" – 5 DIAS.
35 4½ DIA'S. TO SHELL BELOW THE MAIN DECK.
36 RIVETS BET. CLIPS AND TRANSVERSES, BELOW MAIN DK. 7/8" RIVS. – 4½ DIA'S.
37. AND ABOVE MAIN DK. ¾" – 5 DIA'S.
38 RIVETS IN SHELL BUTTS 3½ DIA'S. CENTERS – IN SEAMS 3½ DIA'S. IN WAY
39 OF OIL TO 4 DIAS. AT ENDS. 4 DIA'S. IN Q. RIV. BUTT LAPS
40 RIVETS IN OIL BHDS. SEAMS AND BUTTS 7/8" DIA. 3½ DIAS. IN BOUNDING
41 ANGLES 7/8" RIV'S. 5 DIAS. AS PER RULES.
42 RIVET SPACING IN SIDE LONGLS. 1-2-3-4, TO BE 7/8" – 6 DIA'S. AND
43 IN LONGLS. 5-6, 5 DIAS. FOR 10 SPACES EACH SIDE OF TRANS. OR
44 BHD'S. OTHERS 6 DIA'S. LONGLS. 7 TO 20, 4 DIA'S. FOR 10 SPACES
45 EACH SIDE OF TRANS. OR BHDS. OTHERS 6 DIAS.
46 RIVET SPACING LONGLS. ON UPPER, MAIN, LOWER, BRIDGE, POOP AND FO'C'LE.
47 DECKS, BRIDGE, POOP & FO'C'LE SIDES, EXPAN. TRUNK & BHD. AND INNER
48 BOTTOM, 5 – 6 DIA'S.

STEEL TANK STEAMER

LENGTH BETWEEN PERPENDICULARS	391'-7"
LENGTH OVER ALL	406'-6½"
BEAM MOULDED	51'-0"
DEPTH MOULDED AMIDSHIP	30'-2"

LLOYDS' NUMERALS.

BREADTH	51·00'
DEPTH	30·167
1ST NUMERAL	81.167
LLOYDS' LENGTH = 392·0'. 2ND NUML. =	31817
L/D	12·994
DEPTH, FLOOR TO TANK DECK	20.250'

(LONGITUDINAL FRAMING.)

EQUIPMENT NUMERAL

POOP, BRIDGE AND FO'C'LE.	977
HOUSES ON POOP AND BRIDGE	353
LONGITUDINAL NUMBER	31817
EQUIPMENT NUMBER	33147-y

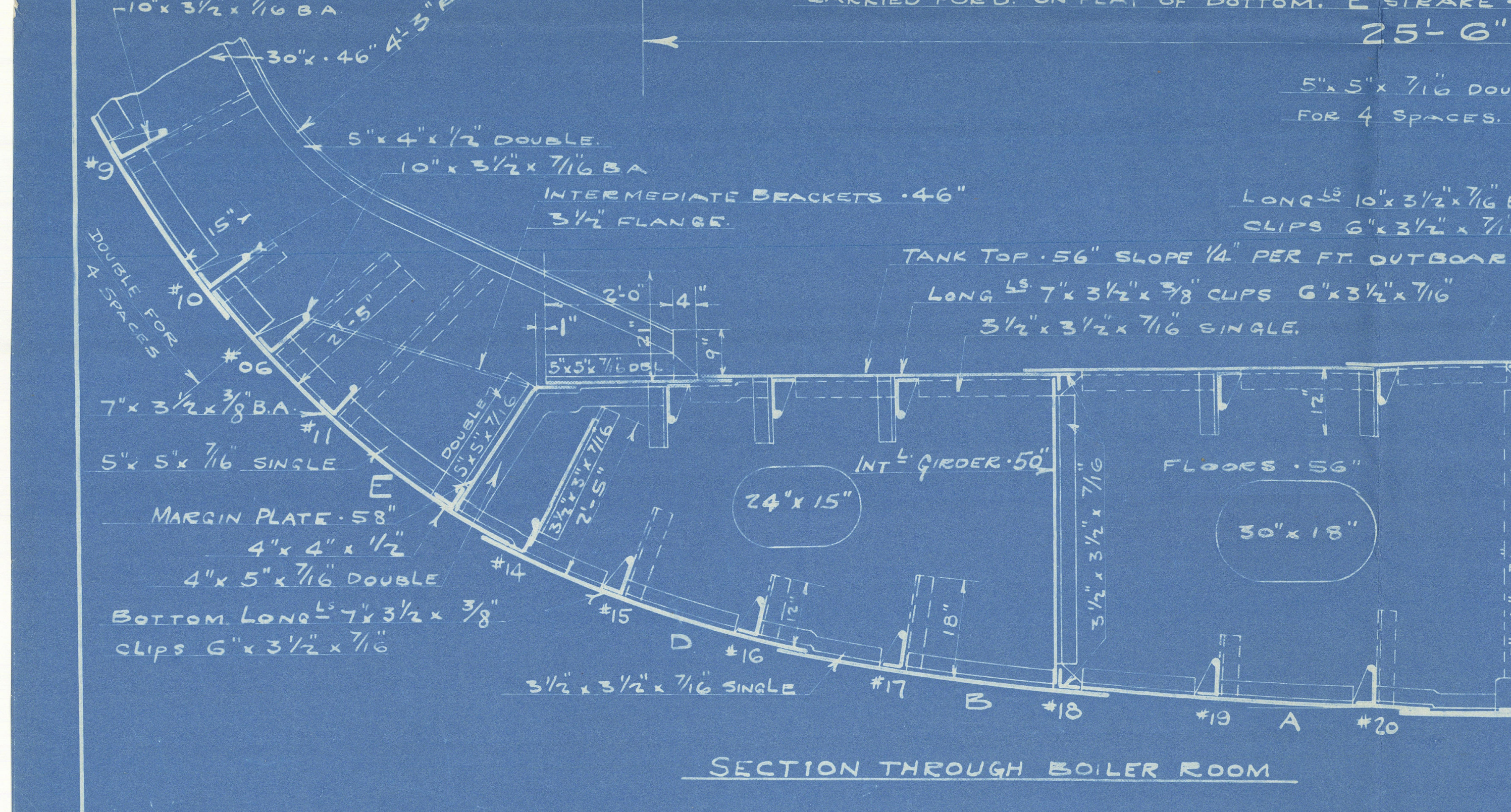
CLASS ✠ 100 A1.

LLOYD'S REGISTER

SPECIAL SURVEY

EQUIPMENT

2-STOCKLESS BOWER ANCHORS 6720 LBS EACH.
1 " " " 5656 "
1-STOCK STREAM ANCHOR 1820 LBS } EX. OF STOCK.
1 " KEDGE " 784 " }
270 FATHOMS 2 3/16 DIA. STUD LINK CHAIN
350 " 2" DIA. GALV. STEEL WIRE HAWSER
4-50 " EA. 1⅛" " " " MOORING LINES
240 " 7" CIR. MANILA WARPS


10"x3½"x7/16 B.A
30"x·46" 4'-3" RAD.
5"x4"x½" DOUBLE.
10"x3½"x7/16 B.A
INTERMEDIATE BRACKETS ·46"
3½" FLANGE.
#9
15"
DOUBLE FOR 4 SPACES
#10
#06
7"x3½"x3/8" B.A.
#11
5"x5"x7/16 SINGLE
E
MARGIN PLATE ·58"
4"x4"x½"
4"x5"x7/16 DOUBLE
BOTTOM LONGLS 7"x3½x3/8"
CLIPS 6"x3½"x7/16
2'-0"
4"
1"
9"
5"x5"x7/16 DBL.
DOUBLE 5"x5"x7/16
3½"x3½"x7/16
2'-5"
INTL. GIRDER ·50"
24"x15"
FLOORS ·56"
30"x18"
18"
12"
5"x5"x7/16 SINGLE
#14 #15 #16 #17 #18 #19 #20
D B A
3½"x3½"x7/16 SINGLE

TANK TOP ·56" SLOPE ¼" PER FT. OUTBOARD.

LONGLS 7"x3½"x3/8" CLIPS 6"x3½"x7/16"
3½"x3½"x7/16 SINGLE.

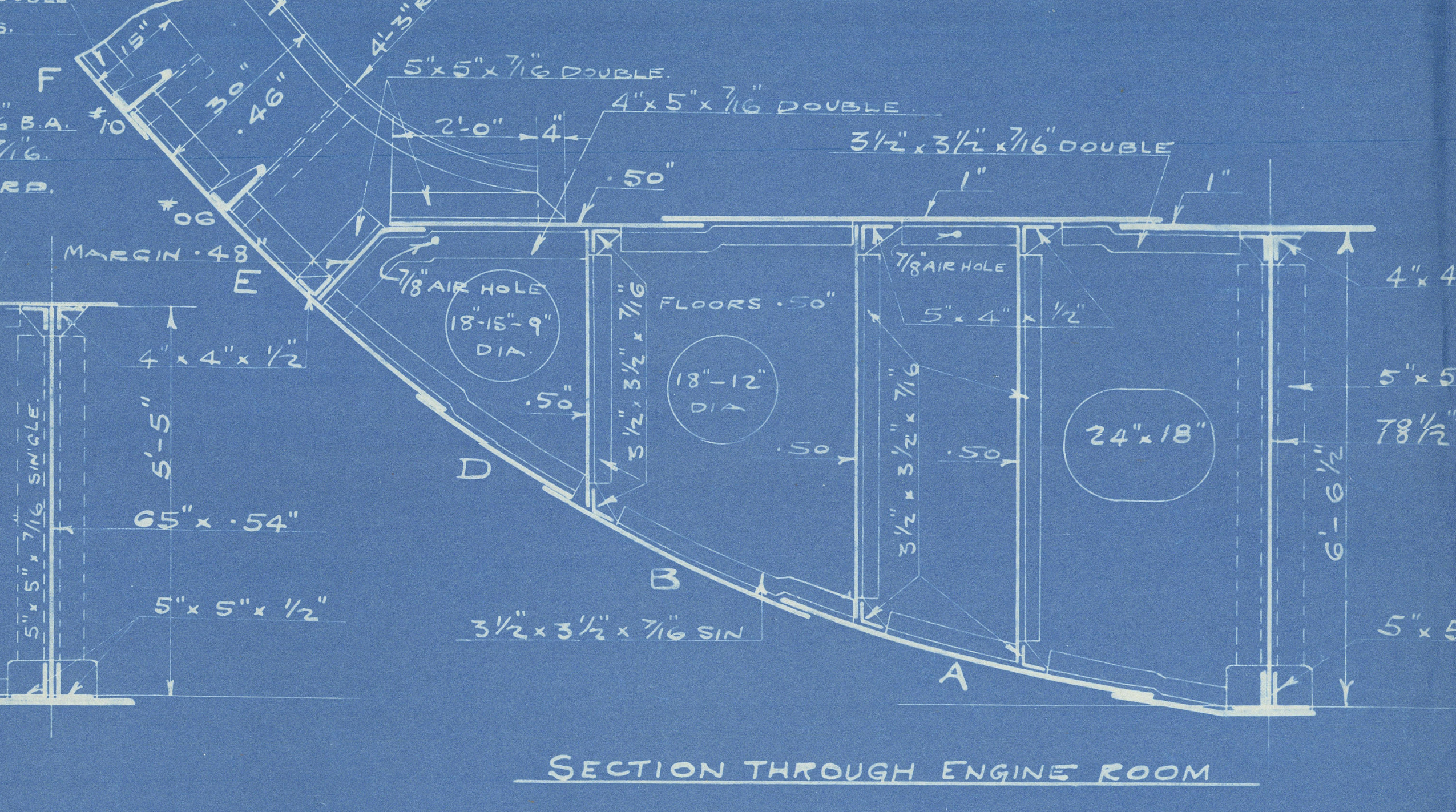
LONGLS 10"x3½"x7/16 B.A.
CLIPS 6"x3½"x7/16.

5"x5"x7/16 DOUBLE FOR 4 SPACES.

MARGIN ·48

4"x4"x½"
5'-5"
65"x·54"
5"x5"x½"

SECTION THROUGH BOILER ROOM


5"x4"x½" DOUBLE.
4'-3" R.
F
15"
30"
·46"
#10
#06
5"x5"x7/16 DOUBLE.
4"x5"x7/16 DOUBLE
3½"x3½"x7/16 DOUBLE
2'-0"
4"
·50"
1"
1"
E
7/8" AIR HOLE
18"-15"-9" DIA
FLOORS ·50"
18"-12" DIA
·50"
7/8" AIR HOLE
5"x4"x½"
3½"x3½"x7/16
24"x18"
D
B
A
3½"x3½"x7/16 SIN
4"x4"x½"
5"x5"x7/16 SINGLE
78½"x·50"
6'-6½"
5"x5"x½"

SECTION THROUGH ENGINE ROOM

FOR CONTRACT 189

18 5 1
17 AP 17.
19 5 1
23 MY 17
20 MAIL 1
31 MY 1
22 MAIL 2
15 JE 17
FOR 189
23 MAIL 1
AG 17
24-25 MAIL 2
AM 18
26 LLOYDS MAIL 1
14 JE 18

1-6 MAIL 6
7 LIB 1
8-9 9 2
10 M10 1
11-12 5-10 2
13 5 1
14 5 1
16-AG-15
15 MAIL 1
18
16 LLOYDS
8 AG 15
17 MAIL 1
21 F 17.

391'-7" x 51'-0" x 30'-2"

MIDSHIP SECTION

SCALE ½" = 1 FOOT.

MADE BY A.G.W. DATE 10 AG 1915

NEW YORK SHIPBUILDING COMPANY
CAMDEN, NEW JERSEY, U.S.A.

DR. 172-201-B.

E. H. Rigg NAVAL ARCHITECT.

W1188-0063

Nº 189

PHILADELPHIA

NEW YORK SHIPBUILDING CO.

3 MAIN BOILERS

W.P. 190 lbs.

OK

Nº 132
LLOYDS TEST
285 lbs
9.6.17 A.T.T.

S/S "Gulfland."

London approved Phl 2883.

RETAIN

NEW YORK SHIPBUILDING CO.
CAMDEN, N.J., U.S.A.
BLUE PRINT ROOM

Print No. 8
Made MAY 3 1916
For Dep't MAIL

W1188-0063

20/5/16

12-CONTINUOUS THREADS PER INCH
7 FT 6"
STAY TUBE 1/4" THICK
ORDINARY TUBE #10 B.W.G.
1 1/4" RIVETS 1 5/16" HOLES
1 1/2" RIVETS 1 9/16" HOLES.
1 1/2" RIVETS 1 9/16" HOLES ABT 4 1/4" PITCH
1 1/4" RIVETS 1 5/16" HOLES ABT 3 3/4" PITCH.
INSIDE BUTTSTRAP 1 3/16" THICK
OUTSIDE BUTTSTRAP 1 3/16" THICK.
111 ORDINARY TUBES
102 ORDINARY TUBES
TUBES 2 3/4" O.D. SEAMLESS COLD DRAWN STEEL
324 ORDINARY TUBES 2 3/4" O.D. #10 B.W.G.
124 STAY " 1/4" THICK
448 TOTAL
11 FT 2 1/2" BET. TOP HEADS
STEEL NET AREA 5.93
3/4" DIA 4 THDS PER INCH.
2" STAY W.I. NET AREA 3.14
1 5/8" W.I. STAYS
12 FULL V THREADS PER INCH.
8 FT 0 1/2" OVER FURNACE
GRATE 5 FT 6" LONG
2" STAY STEEL
FUSIBLE PLUG.
5 FT 11 1/8"
LAP IN MIDDLE CIRCUMFERENTIAL SEAM, TRIPLE RIVETED FOR THIS LENGTH.
3/4" RIVETS FLUSH 4 1/2" P.C.
45°
C.C. WRAPPER
ANGLE STIFFENER
HEAD
FURNACE
BOTTOM HEAD.
7/8" RIVETS 15/16" HOLES 2 1/8" PITCH.
TUBE SHEET FIRE SIDE
WATER SIDE
BACK SHEET
TUBE SHEET
WRAPPER
FURNACE & C.C. TUBE SHEET.
C.C. TUBE SHEET & WRAPPER
C.C. BACK SHEET & WRAPPER

BUREAU OF COMMERCE

$$\text{PLATE }\% = \frac{10.125 - 1.5625 \times 100}{10.125} = 84.4\%$$

$$\text{RIVET }\% = \frac{5 \times 1.917 \times 1.75 \times .85}{10.125 \times 1.375} \times 100 = 102\%$$

LLOYDS RULE

$$\text{PLATE }\% = \frac{10.125 - 1.5626}{10.125} \times 100 = 84.4\%$$

$$\text{RIVET }\% \; \frac{5 \times 1.767 \times 1.75 \times 85}{10.125 \times 1.375} = 94\%$$

ALTERATIONS	DATE	APP'D

CONSTRUCTED UNDER THE RULES OF BOARD OF SUPERVISING INSPECTOR'S DEPT OF COMMERCE & LLOYDS REGISTER
FOR 190 LBS WORKING PRESSURE

DESCRIPTION	THICKNESS	U.S. RULES	LLOYDS RULES
SHELL	$1\frac{3}{8}$	$P = \frac{63000 \times 1.375}{6 \times 89.375} + 20\% = 193\#$	$P = \frac{22 \times (22-2) \times 84.4}{180.125} = 206\#$
FURNACE	$\frac{19}{32}$	$P = \frac{15600 \times .5937}{44} = 210\#$	$P = \frac{1259 \times (9.5-2)}{46.1875} = 204\#$
TOP HEAD PLATE	$1\frac{1}{8}$	$P = \frac{175 \times 18^2}{17^2} = 196\#$	$P = \frac{175 \times 18^2}{260.781} = 217\#$
TOP HEAD STAYS	$2\frac{3}{4}$	$S = \frac{17 \times 15.25 \times 190}{5.939} = 8293\#$	$P = \frac{10400 \times 5.939}{17 \times 15.25} = 238\#$
TUBE PLATE	$\frac{3}{4}$	$P = \frac{(3.75-2.232).75 \times 27000}{34.875 \times 3.75} = 235\#$	$P = \frac{(3.75-2.232) \times 1750 \times 12}{33.5 \times 3.75} = 253\#$
C.C. CROWN PLATE	$\frac{5}{8}$	$P = \frac{135 \times 10^2}{7.5^2} = 240\#$	$P = \frac{135 \times 10^2}{52.62} = 256\#$
C.C. CROWN STAYS	$1\frac{5}{8}$	$S = \frac{7.5 \times 7 \times 190}{1.694} = 5888\#$	$P = \frac{6000 \times 1.694}{7.5 \times 7} = 193\#$
C.C. WRAPPER PLATE	$\frac{5}{8}$	$P = \frac{135 \times 10^2}{7.25^2} = 256\#$	$P = \frac{135 \times 10^2}{50.78} = 265\#$
C.C. WRAPPER STAYS	$1\frac{5}{8}$	$S = \frac{7.25 \times 7 \times 190}{1.694} = 5692\#$	$P = \frac{6000 \times 1.694}{7.25 \times 7} = 200\#$
C.C. BACK PLATE	$\frac{5}{8}$	$P = \frac{135 \times 10^2}{7.5^2} = 240\#$	$P = \frac{135 \times 10^2}{52.62} = 256\#$
C.C. BACK STAYS	$1\frac{5}{8}$	$S = \frac{7.5 \times 7 \times 190}{1.694} = 5888\#$	$P = \frac{6000 \times 1.694}{7.5 \times 7} = 193\#$
CROWN GIRDERS	$9 \times \frac{7}{8}$	$P = \frac{917 \times 9^2 \times 1.75}{(34.875-7) \times 7.5 \times 2.906} = 213\#$	$P = \frac{11850 \times 9^2 \times 1.75}{(33.5-7) \times 7.5 \times 33.5} = 252\#$
WIDE WATER SPACE FRONT HEAD	$1\frac{1}{16}$		$P = \frac{140 \times 17^2}{13.5^2} = 222\#$

BOILER DATA – ONE BOILER

	HEATING SURFACE
TUBES	2199.1 □'
FURNACES	149.4 □'
COMB. CHAMBER	220 □'
BACK TUBE PLATE	46 □'
TOTAL H.S.	2614.5 □'
GRATE SURFACE	57.75 □'
$\frac{H.S.}{G.S.}$	45.3
CALORIMETER	11.5 □'
$\frac{G.S.}{CAL.}$	5

TENSILE STRENGTH OF SHELL PLATES & GIRDERS 63000 TO 71680 LBS.
" " " FLANGE " 58240 TO 67200 LBS

WORKING PRESSURE 190 LBS PER SQ. INCH
WATER TEST " 285 " " " "

EVAPORATION 270 LBS. OF WATER PER SQ. FT. OF GRATE PER HOUR.
TWIN SAFETY VALVE COMBINED AREA OF $4\frac{1}{2}$" DIA.

FOR DETAILS OF BOTTOM HEAD STAYS
SEE DR. 189-561-3

2-BOILERS AS DRAWN
1-BOILER TO OTHER HAND.

THIS DRAWING SUPERSEDES
DR. 189-561-1

ALL CALKING EDGES OF BOILER PLATE TO BE MACHINE PLANED, SEAMS, BUTTS, AND LAPS TO FIT CLOSELY DRAWN UP, METAL TO METAL, AND AFTER BEING RIVETED CALKED INSIDE AND OUTSIDE.

R. Haig

SURVEYOR TO LLOYDS REGISTER
PHILADELPHIA, PENNA.
MAY 6 - 1916

1 9 CK
3-MY-16
2.9 PREL
4-MY-16
3 MAIL 1
4.5 MAIL 2
6.9 MAIL 4
4-MY-16

ALL SCREW STAYS W.I.
SCREW STAYS ON BACK HEAD MARKED THUS
◎ 2" DIA NUTS $1\frac{1}{4}$" DEEP IN C.C. & BACK HEAD
NET AREA = 2.677 □"
SCREW STAY ON BACK HEAD MARKED THUS
○ $1\frac{5}{8}$ DIA. NUTS 1" DEEP IN C.C. NO NUTS ON BACK HEAD. NET AREA = 1.694 □"
WRAPPER SCREW STAYS $1\frac{5}{8}$" DIA. NUTS 1" DEEP
GIRDER SCREW STAYS $1\frac{5}{8}$" DIA. NUTS $1\frac{5}{8}$" & 1" DEEP.
ALL SCREW STAYS HAVE 12 FULL-V-THREADS PER INCH.
ALL SCREW STAYS TO HAVE $\frac{3}{16}$" HOLE DRILLED $\frac{1}{2}$" BEYOND INNER SURFACE OF PLATE

20.5.16

ENGINE DEPARTMENT.
TITLE $14^{FT}\,10\frac{3}{4}$" MEAN DIA × $11^{FT}\,2\frac{1}{2}$" BET. HEADS
S.E. SCOTCH BOILER
190 LBS WORKING PRESSURE.
SCALE 1" = 1 FT. DRAWN BY 223 DATE
TRACED BY 223 CHECKED BY 221 CHIEF DRAFTSMAN
NEW YORK SHIPBUILDING COMPANY.
CAMDEN, NEW JERSEY, U.S.A.
DR. 189-561-4
APPROVED CHIEF ENGINEER.

W1188-0063

W1188-0064

New York S B C

Contract No 189

1 Donkey boiler
W.P. 120 lbs

No 149
LLOYDS TEST
180 lbs
28.9.17 A.T.T.

S/S "Gulfland."

Phl 2883.

RETAIN
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Lloyd's Register
Foundation

NEW Y[illegible]UILDING CO.
CAMDEN, N.J., U.S.A.
BLUE PRINT ROOM

Print No. 111
Made JAN 3 1916
For Dep't Lloyds

W1188-0064

U.S. RULES

$$PLATE\ \% = \frac{2.28 - .687}{2.28} \times 100 = 69.8\ \%$$

$$RIVET\ \% = \frac{2 \times .371 \times .85}{2.28 \times .312} \times 100 = 88.6\ \%$$

LLOYDS RULES

$$PLATE\ \% = \frac{2.28 - .687}{2.28} \times 100 = 69.8\ \%$$

$$RIVET\ \% = \frac{2 \times .306 \times .85}{2.28 \times .312} = 73.1\ \%$$

ALTERATIONS	DATE	APPROVED
ALT'D IN ACCORDANCE WITH LLOYD'S LETTER DATED DEC-18-1911.		
ADDITIONAL ORDER FOR PADS PC Nº 55	MAY 11/12	P.M.Y.
GAUGE FITTING CHANGED FROM ½" TO ¾" P.T	14:JY:14	P.M.Y.
ADDITIONAL FUSIBLE PLUG AND LOCATION OF OLD ONE ALT'D. FOR CONTS. 156 & 157	5 AG/14	P.M.Y.

CONSTRUCTED UNDER THE RULES OF THE BOARD OF SUPERVISING INSPECTORS DEP'T OF COMMERCE & LABOR & LLOYDS REGISTER.
FOR 120 LBS WORKING STEAM PRESS.

DESCRIPTION	THICKNESS	U.S. RULES	LLOYDS RULES.
SHELL PLATE	$\frac{5}{16}$"	$P = \frac{62720 \times .312}{6 \times 17} + 20\% = 230^{\#}$	$P = \frac{20.5 \times (5-2) \times 69.8}{34.312} = 125^{\#}$
FIRE BOX	$\frac{11}{32}$"	$P = \frac{112 \times 5.5^2}{4.625^2} = 158^{\#}$	$P = \frac{90 \times 5.5^2}{19.726} = 138^{\#}$
FIRE BOX STAY	$\frac{7}{8}$" DIA	$S = \frac{120 \times 4.25 \times 4.625}{.4071} = 5794^{\#}$	

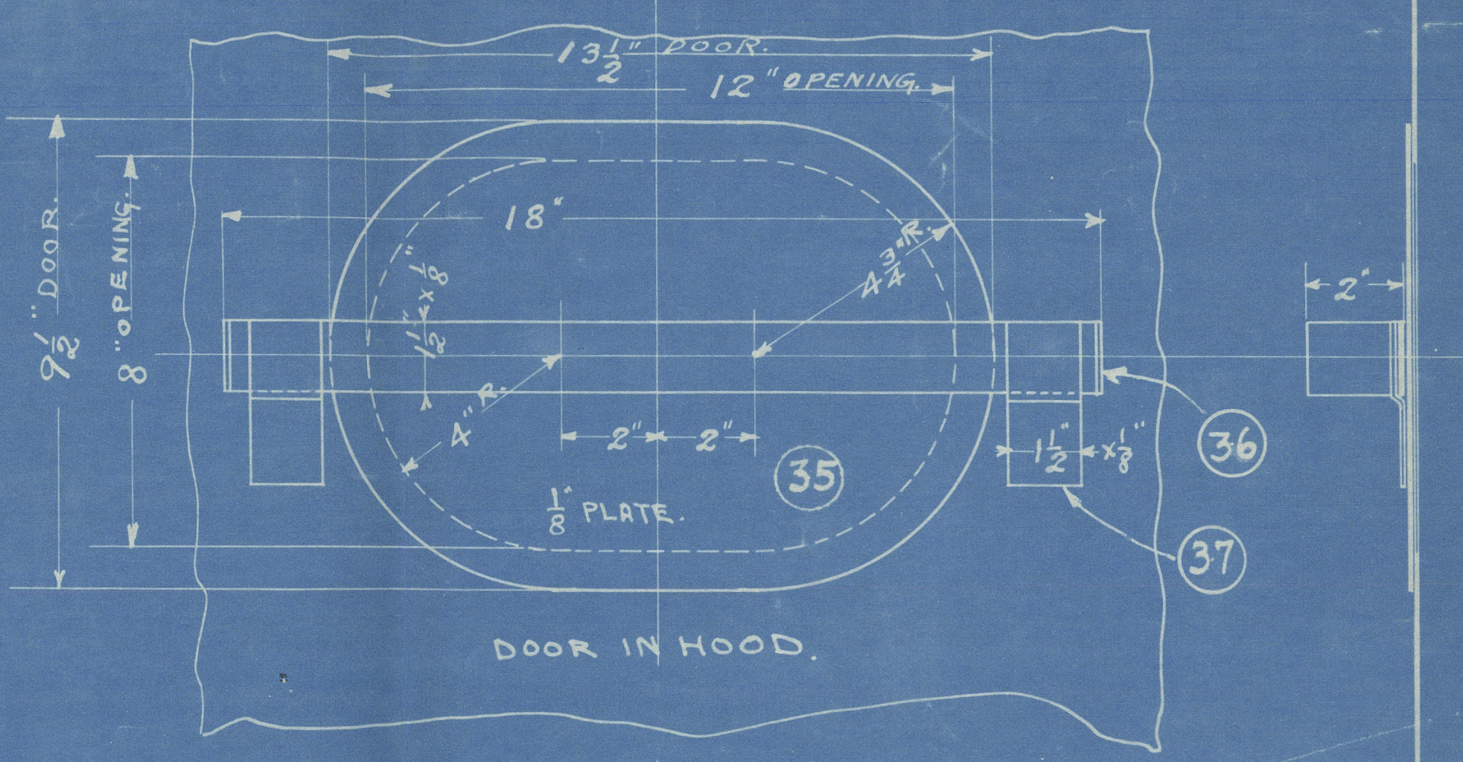
HEATING SURFACE	
TUBES	107.6 ☐'
FIRE BOX	19.1 ☐'
TOTAL H.S.	126.7 ☐'
GRATE SURFACE	4.3 ☐'
RATIO $\frac{H.S.}{G.S.}$	29.4
CALORIMETER	1.03 ☐'
RATIO $\frac{G.S.}{CAL}$	4.1
EVAPORATION 50 LBS. WATER PER SQ.FT. OF GRATE PER HR.	

TENSILE STRENGTH OF SHELL PLATES 62720 TO 71680 LBS
" " " FLANGE " 58240 " 67200 "
WORKING PRESS. 120 LBS PER SQ. INCH
WATER TEST " 180 " " "
2" DIA. SAFETY VALVE SINGLE SPRING.

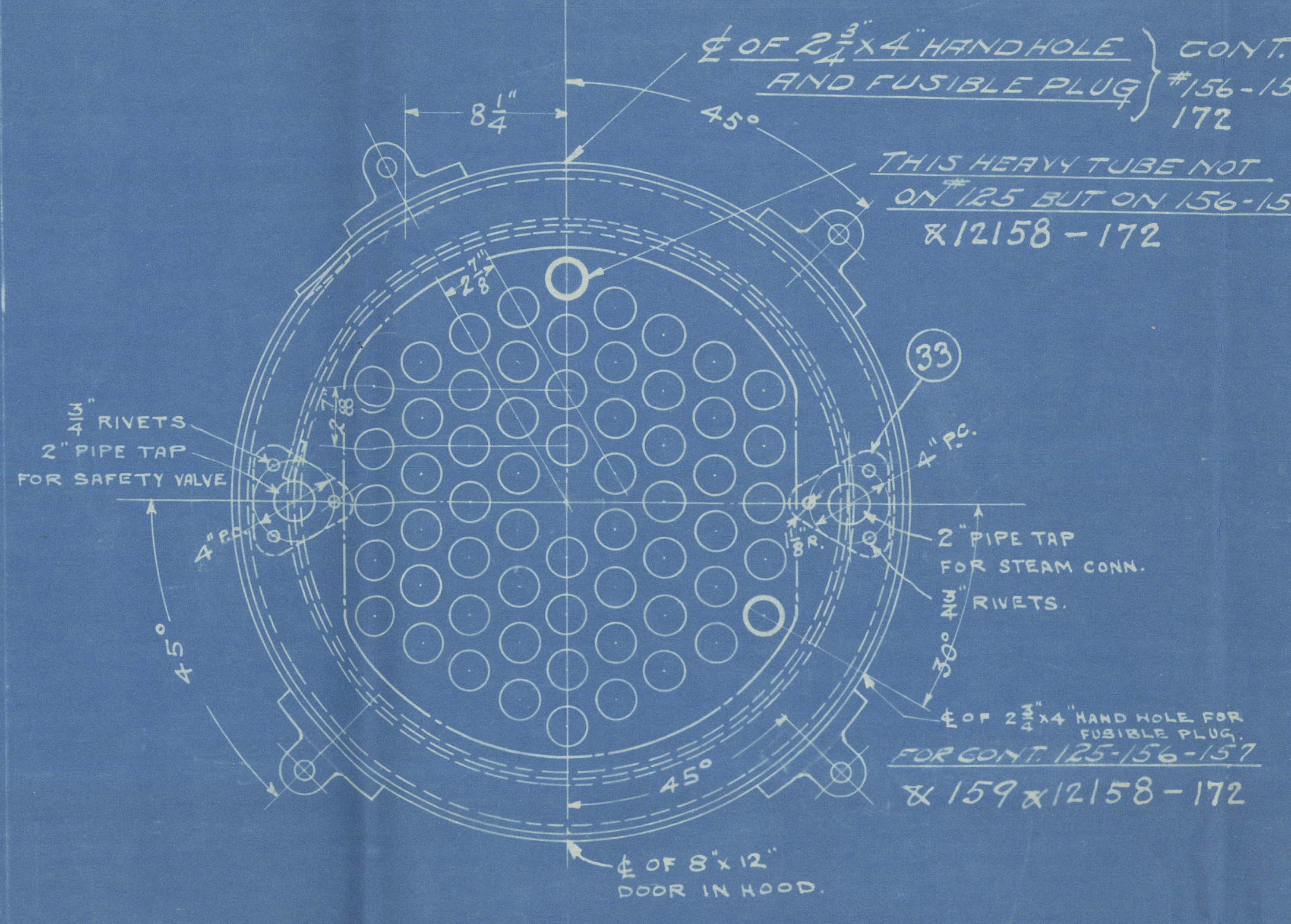
FOR CONT 12158 SEE B/M 12158-4-5-6-7-8-9-10-11-12-13-14 P.M.Y.
" " 172 " " 172-565-1-2-3-4-5-6-7-8-13-36-46 P.M.Y.

QUANTITY FOR ONE COMPLETE							
Nº PCS	NAME	MAT'L	PATT Nº	WT. LBS	REMARKS	DR. Nº	PC. Nº
1	ASH PAN	C.I.	125-565-17			125-641-1	17
1	MIDDLE GRATE BAR	"	125-565-18			"	18
2	SIDE " "	"	125-565-19			"	19
2	HALF BEARER BAR	W.I.			FASTENED TOGETHER WITH SINGLE BUTTSTRAPS.	"	20
3	BEARER BAR SUPPORT	W.I.				"	21
1	DOOR ELLIPTICAL	S			16½" x 11½" x ¼"	"	22
1	BAFFLE "	"			13" x 9" x ¼"	"	23
2	HINGES	W.I.				"	24
1	HINGE BRACKET.	"				"	25
1	" PIN	"				"	26
1	LATCH	"				"	27
1	GUARD	"				"	28
1	CATCH	"				"	29
1	BOLT	"				"	30
5	¾" GAS PIPE	W.I. STD			1" LONG	"	31
1	DOOR RING	W.I.				"	32
2	REINFORCING PLATE	S.				"	33
1	" "	"			ORD. ON B/M 125-565-1	"	34
1	DOOR IN HOOD	"			13½" x 9½" x ⅛"	"	35
1	CLAMP	W.I.			1½" x ⅛" x 22" LONG	"	36
2	CLIP	"				"	37
1	ASH PIT DOOR	STEEL				"	38
1	" " HANDLE	W.I.				"	39
1	" " ANGLE	STEEL			2" x 2" x ¼" x 19¼" LONG.	"	40
1	REINFORCING PLATE	"			ORD. ON B/M 125-565-1	"	41
1	REINFORCING PLATE	"			"	"	45
3	" "	"			"	"	46
1	" "	"			"	"	47
1	" "	"			"	"	51
1	" "	"			TAKE FROM PLATE CUT OUT OF SHELL FOR FIRE DOOR OPENING	"	52
4	PAD	C.S	125-565-55			"	55

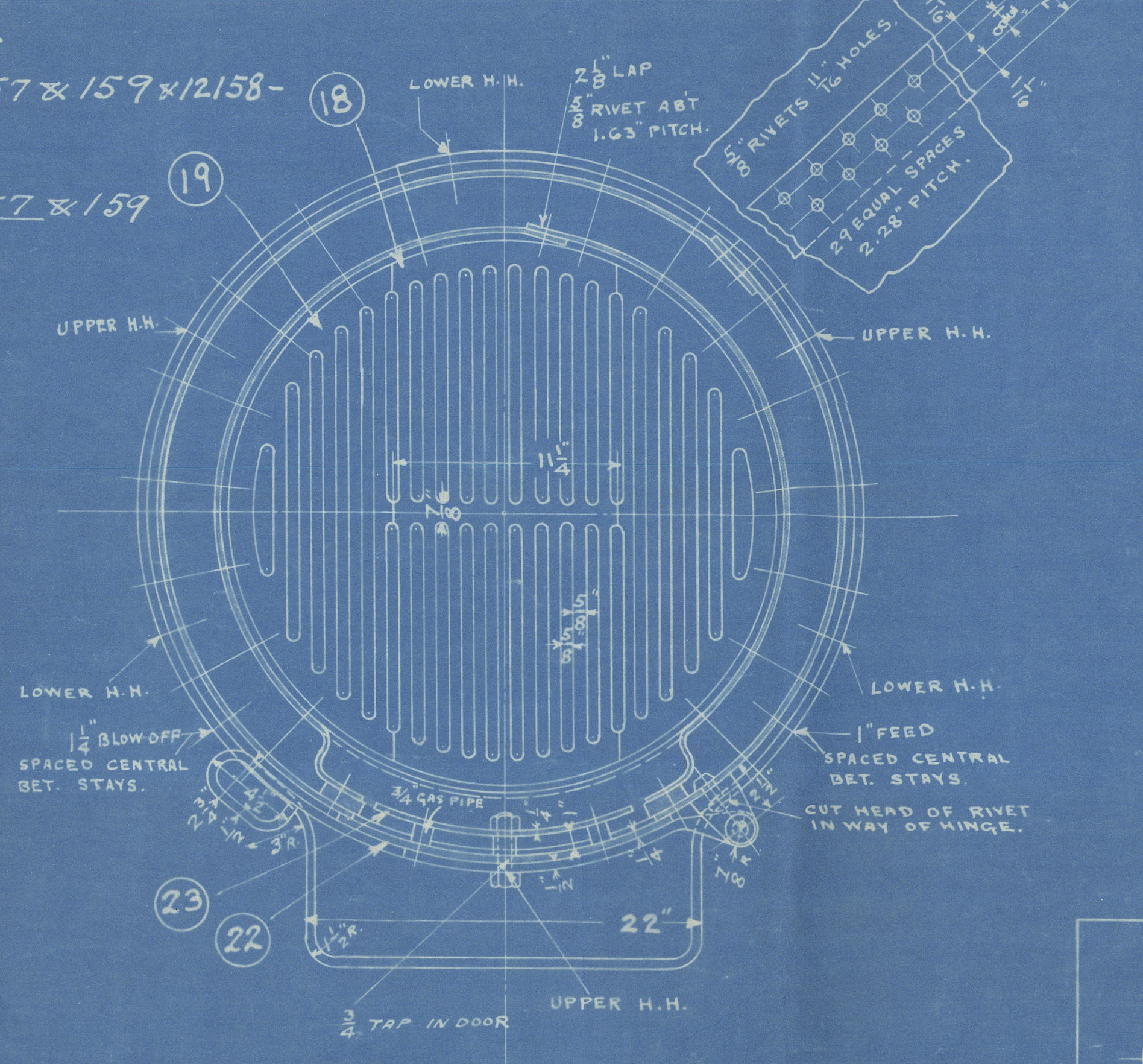
FOR CONT. 156/157 SEE B/M 156/157-565-1-2-3-4-5-6-7-8-13-36-46-49-50-51-52
" " 159 " " 159-565-1-2-3-4-5-6-7-8-13-36-46 P.M.Y.



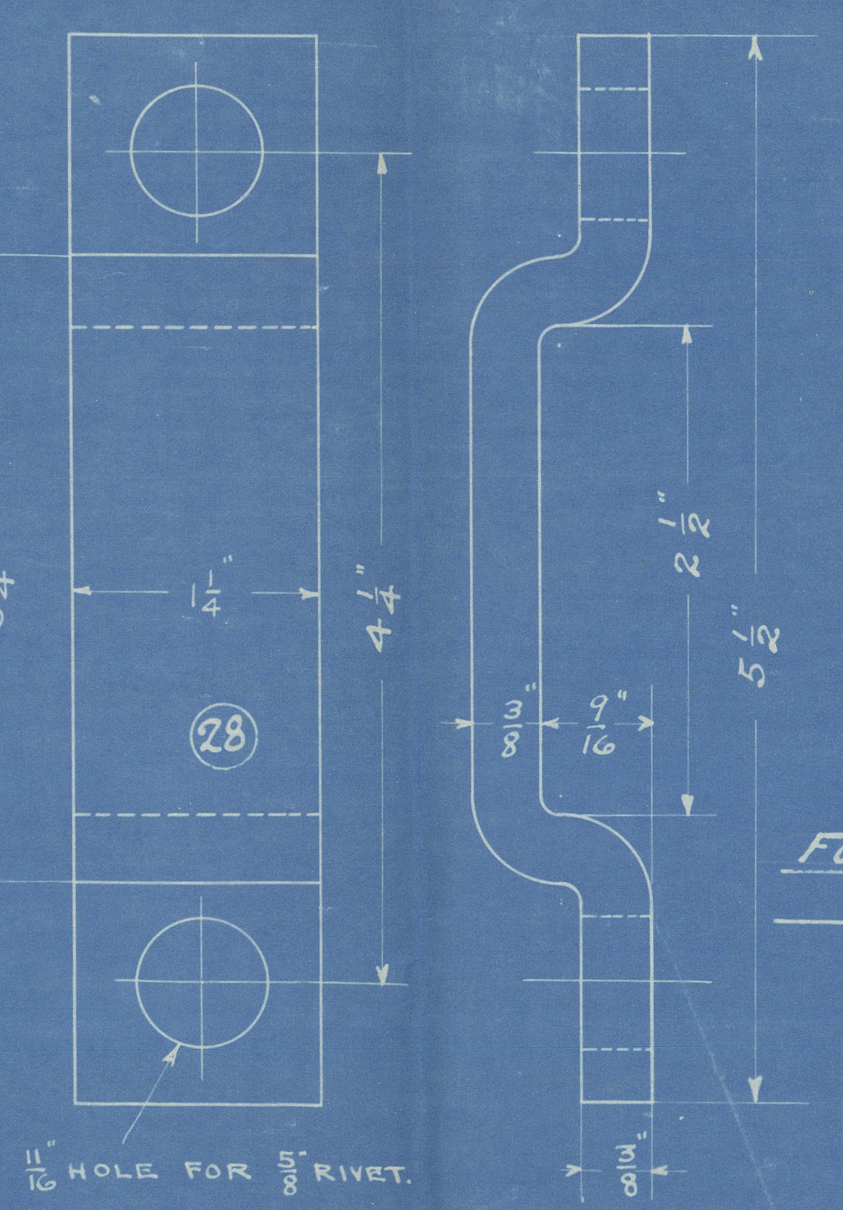
13½" DOOR
12" OPENING
9½" DOOR
8" OPENING
18"
2"
⅛" PLATE
35
36
37
DOOR IN HOOD.



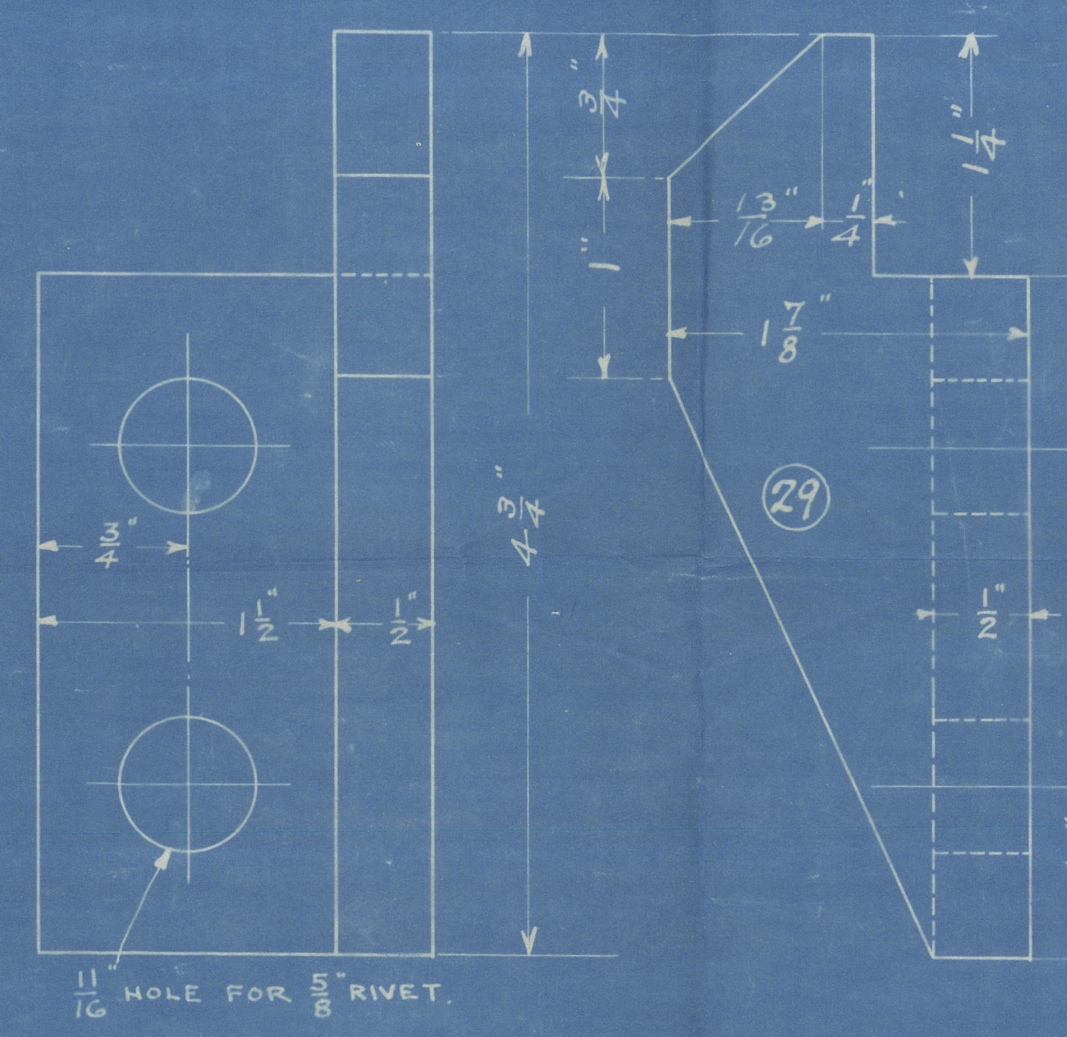
℄ OF 2½" x 4 HAND HOLE AND FUSIBLE PLUG CONT. 156-157 & 159 & 12158-172
THIS HEAVY TUBE NOT ON 125 BUT ON 156-157 & 159 & 12158-172
8¼"
45°
33
¾" RIVETS
2" PIPE TAP FOR SAFETY VALVE
2" PIPE TAP FOR STEAM CONN.
RIVETS
℄ OF 2½" x 4" HAND HOLE FOR FUSIBLE PLUG
FOR CONT 125-156-157 & 159 & 12158-172
℄ OF 8" x 12" DOOR IN HOOD
45°



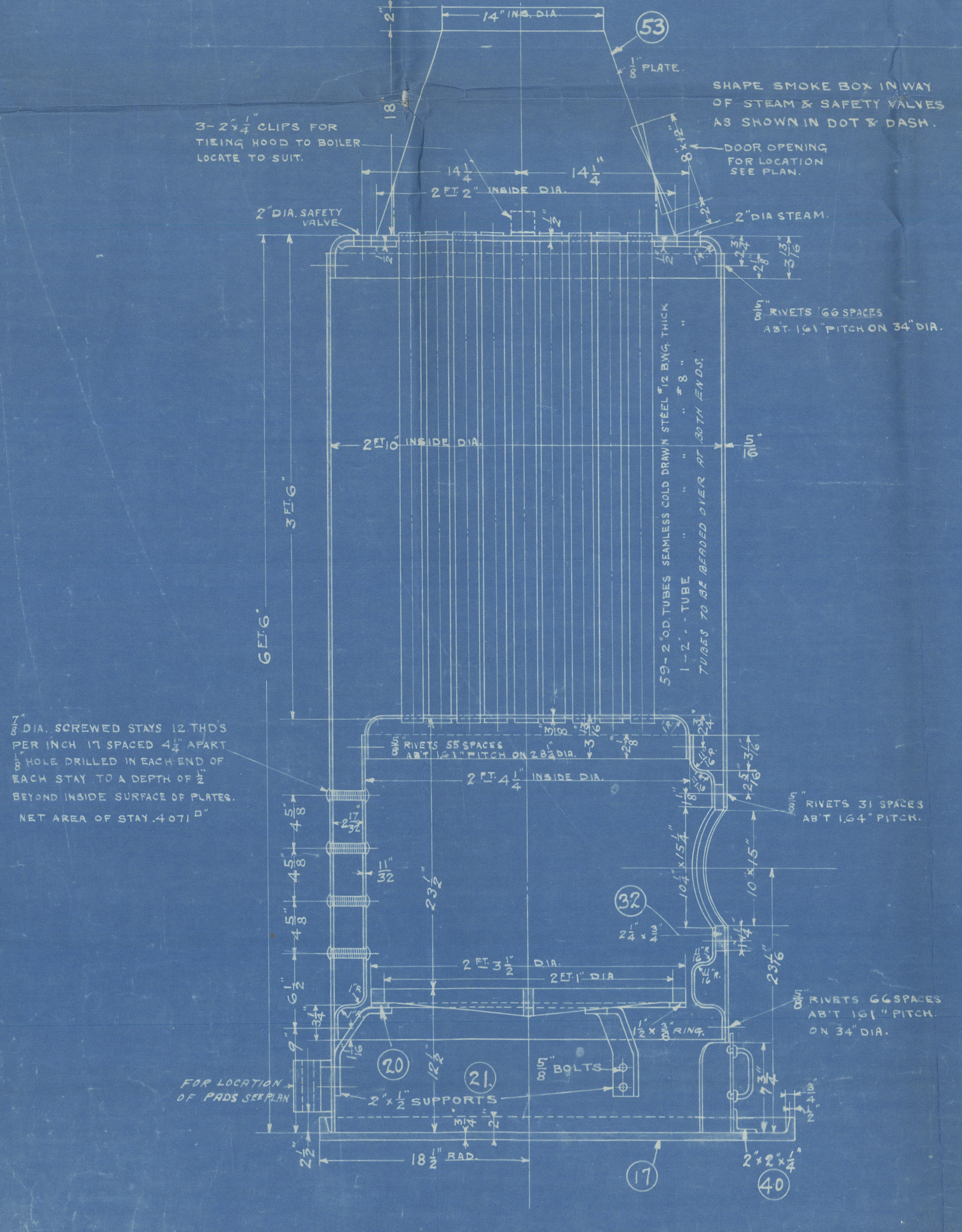
18
19
LOWER H.H.
2½" LAP
⅝" RIVET 4.87 1.25" PITCH
UPPER H.H.
⅝" RIVETS 1½ SPACES
SPACING CENTRAL SET STAYS
1½" BLOW OFF
SPACED CENTRAL SET. STAYS
LOWER H.H.
LOWER H.H.
1" FEED
SPACED CENTRAL SET. STAYS
CUT HEAD OF RIVET IN WAY OF HINGE.
23
22
22"
UPPER H.H.
¾" TAP IN DOOR



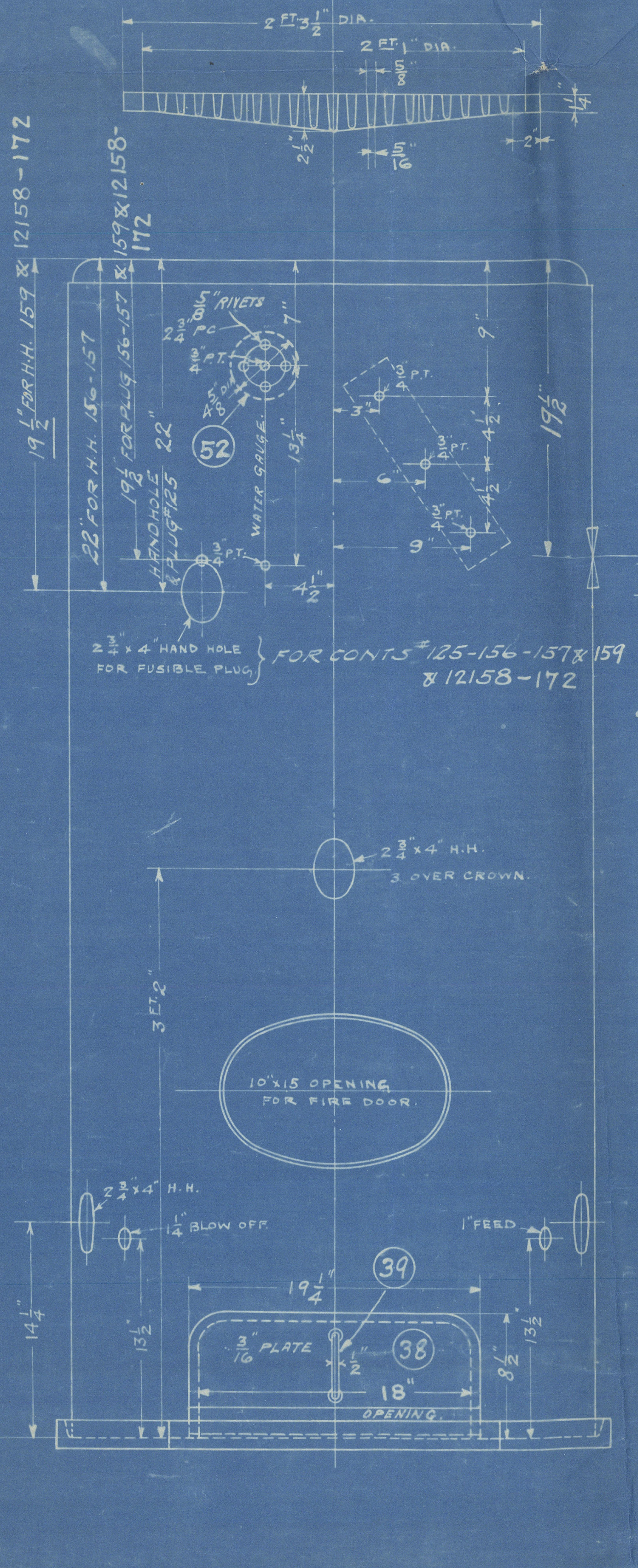
28
3¼"
4¼"
2½"
5½"
9/16"
⅜"
⅜"
11/16" HOLE FOR ⅝" RIVET.



29
11/16" HOLE FOR ⅝" RIVET.



14" INS. DIA.
53
⅛" PLATE
SHAPE SMOKE BOX IN WAY OF STEAM & SAFETY VALVES AS SHOWN IN DOT & DASH.
3-2x2¼ CLIPS FOR TIEING HOOD TO BOILER LOCATE TO SUIT.
DOOR OPENING FOR LOCATION SEE PLAN.
2 FT 5¼" INSIDE DIA.
14¼"
2" DIA. SAFETY VALVE
2" DIA STEAM
⅝" RIVETS 56 SPACES ABT 1.61" PITCH ON 34" DIA.
2 FT 10" INSIDE DIA.
3 FT 6"
6 FT 6"
59-2" OD TUBES SEAMLESS COLD DRAWN STEEL
⅞" DIA. SCREWED STAYS 12 THDS PER INCH 17 SPACED 4½" APART ¾" HOLE DRILLED IN EACH END OF EACH STAY TO A DEPTH OF ½" BEYOND INSIDE SURFACE OF PLATES. NET AREA OF STAY .4071 □"
⅝" RIVETS 56 SPACES ABT 1.61" PITCH ON 28¾" DIA.
2 FT 4¼" INSIDE DIA.
⅝" RIVETS 31 SPACES ABT 1.64" PITCH.
32
2 FT 3½"
⅝" RIVETS 66 SPACES ABT 1.61" PITCH ON 34 DIA.
BOLTS
20
21
2 x 2¼ SUPPORTS
FOR LOCATION OF PADS SEE PLAN
18¾ RAD.
17
40

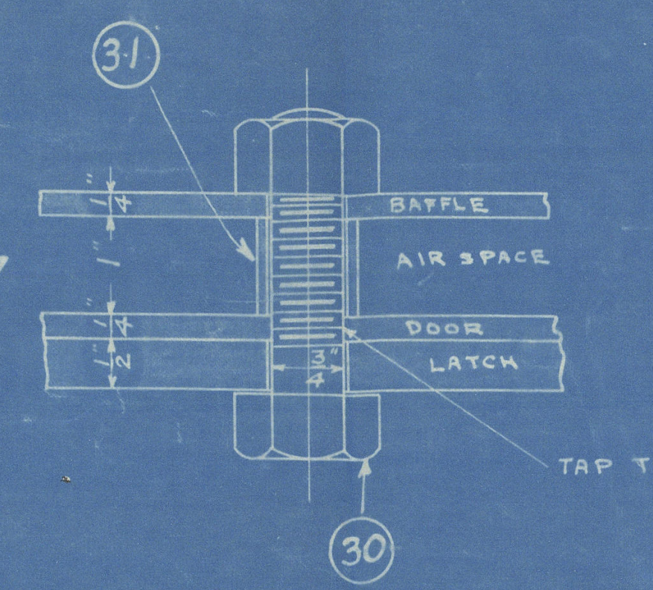


2 FT 3½" DIA.
2 FT 1" DIA.
19½" FOR H.H. 156-157 & 159 & 12158-172
22" FOR H.H.
⅝ RIVETS
52
38
2½" x 4 HAND HOLE FOR FUSIBLE PLUG.
2½" x 4" H.H.
½ OVER CROWN
10" x 15 OPENING FOR FIRE DOOR
2½" x 4" H.H.
1½" BLOW OFF
1" FEED
39
⅝" PLATE
19¼"
18"
OPENING

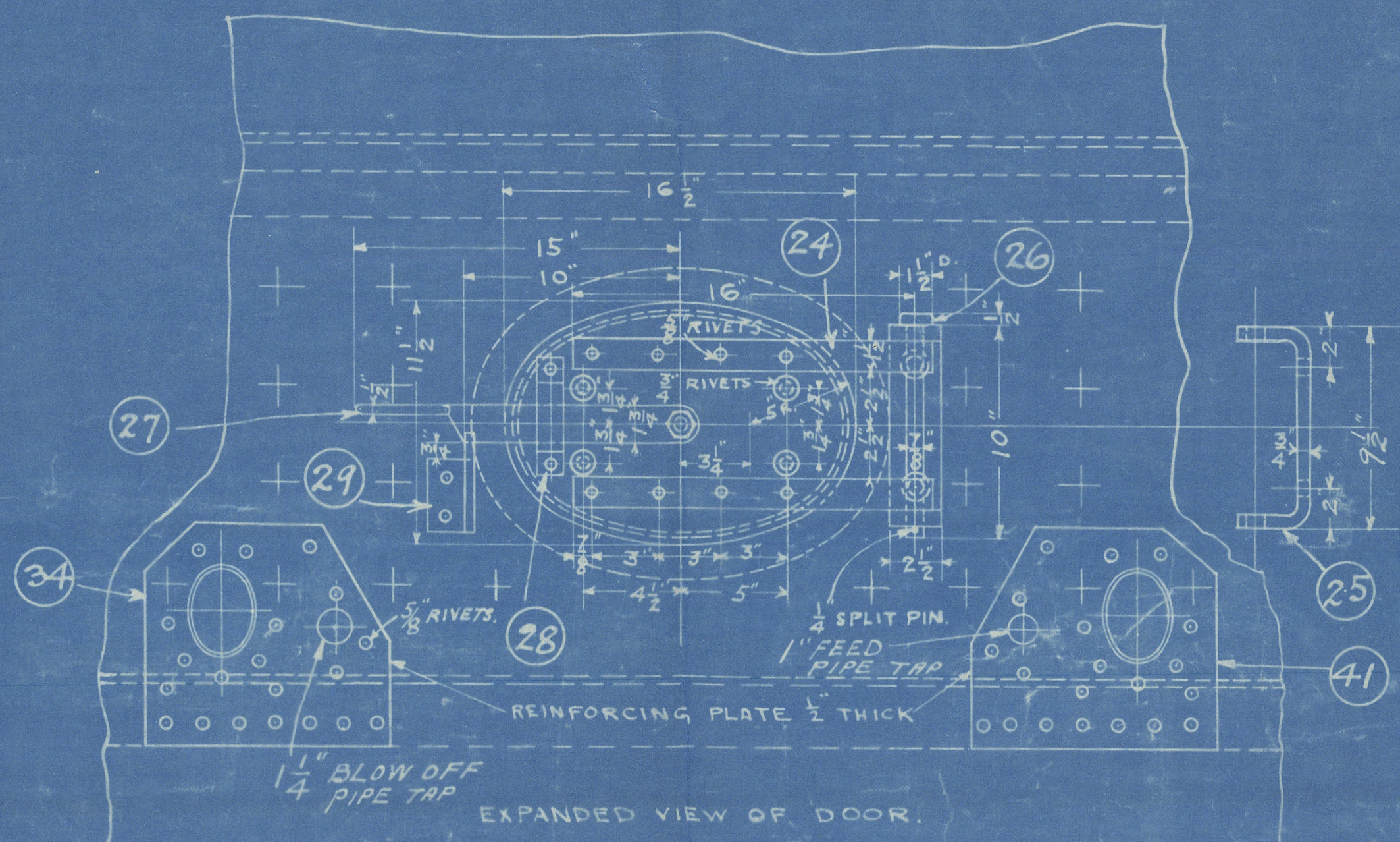
℄ 2½ x 4 HAND HOLE AND FUSIBLE PLUG FOR CONT 156-157 & 159 & 12158-172

FOR CONTS 125-156-157 & 159 & 12158-172

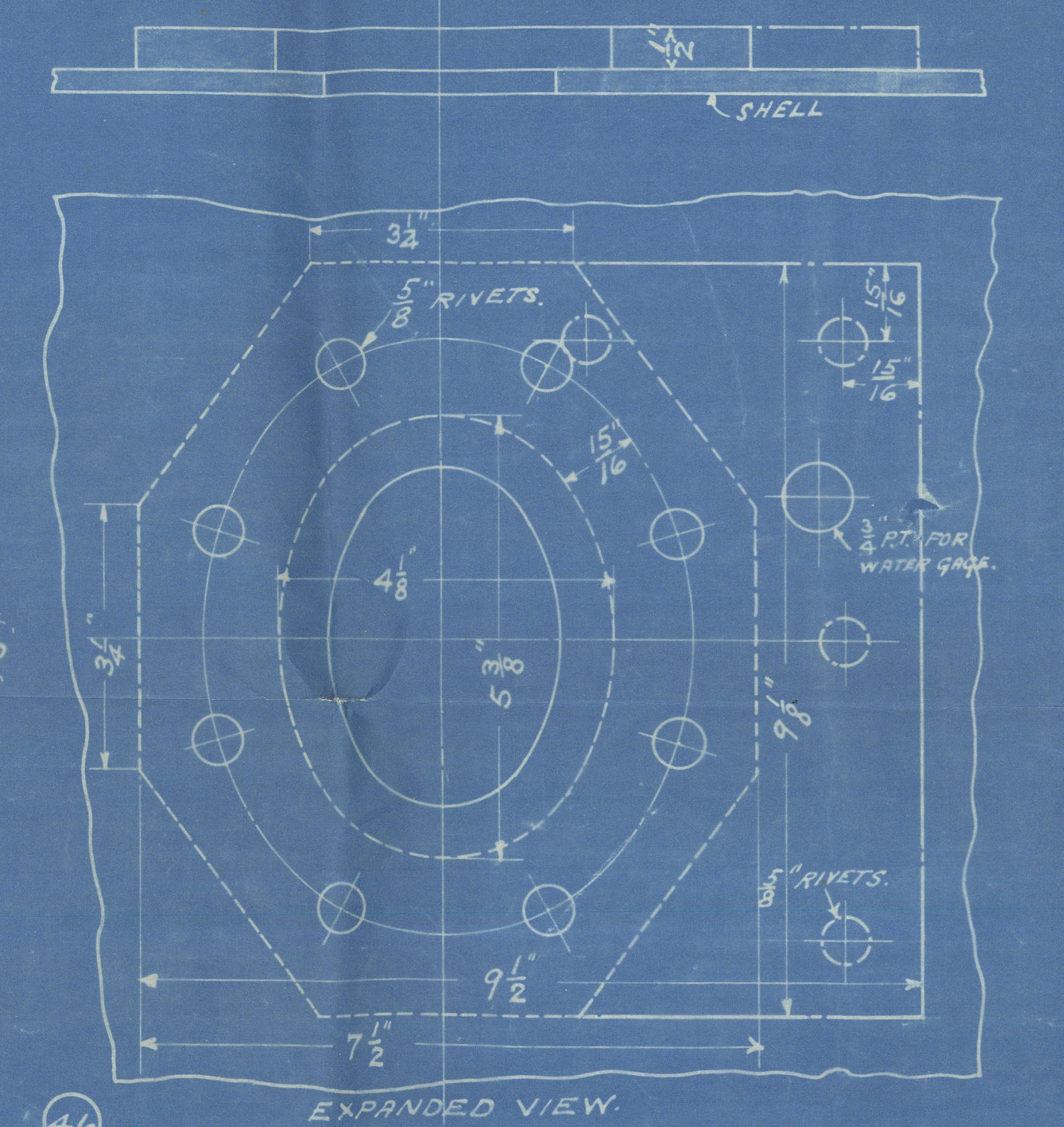
FOR REINFORCE PLATE SEE B/M 156/157-565-52



31
BAFFLE
AIR SPACE
DOOR
LATCH
TAP THRO DOOR
30

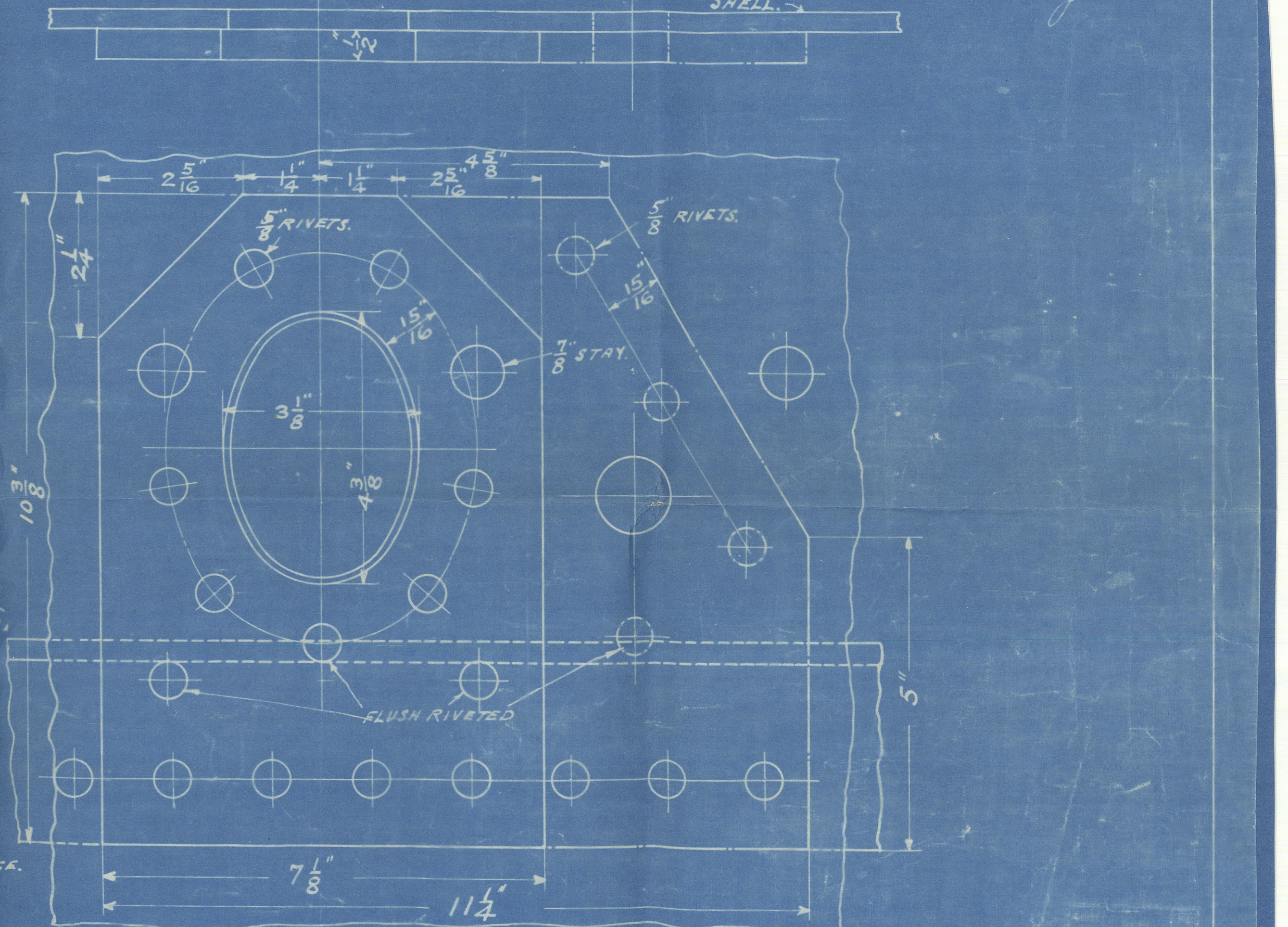


16½"
15"
24
26
27
29
28
25
34
41
⅝ RIVETS
1" FEED PIPE TAP
SPLIT PIN
REINFORCING PLATE ½" THICK
1½" BLOW OFF PIPE TAP
EXPANDED VIEW OF DOOR.



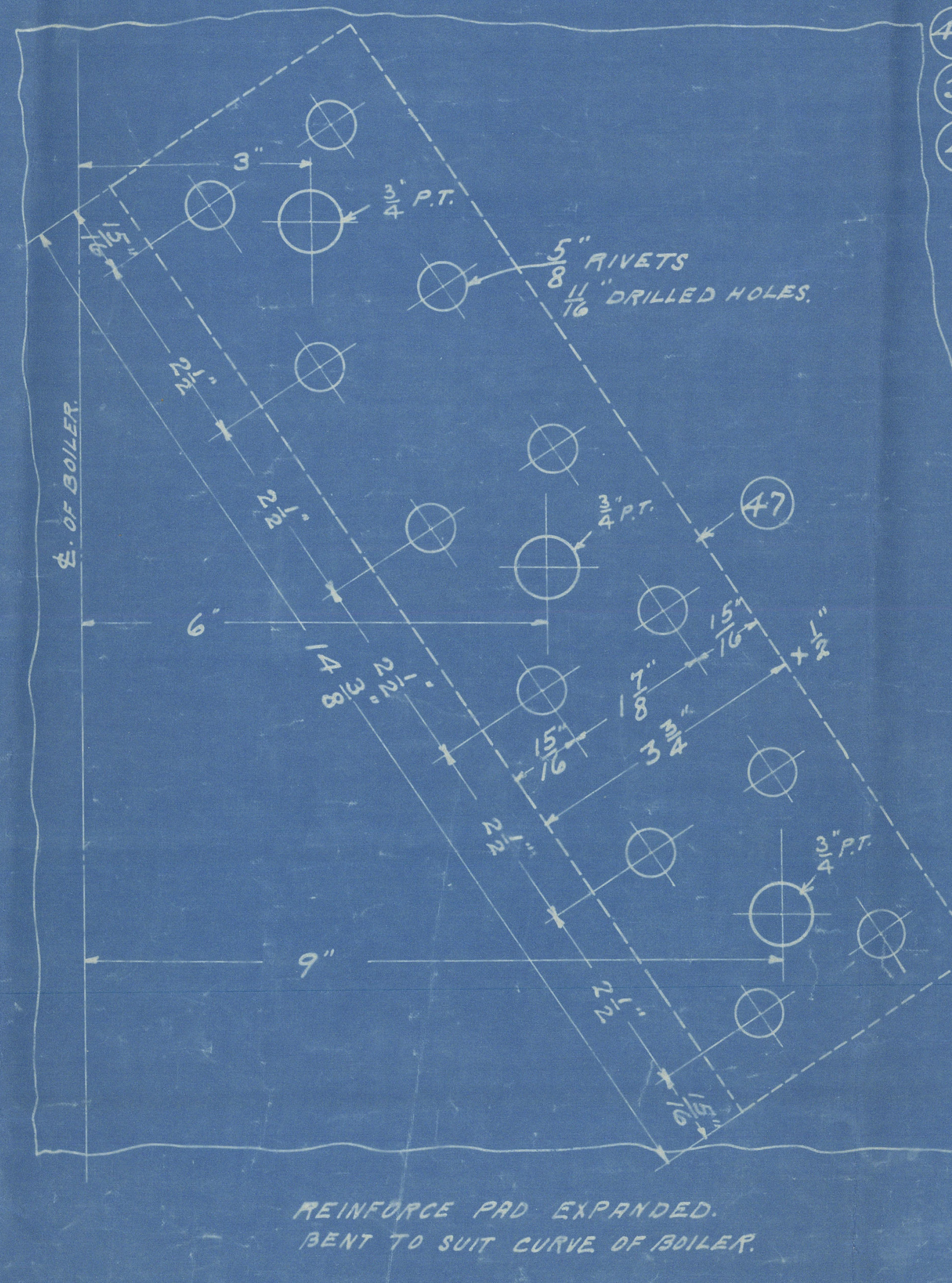
SHELL
3½"
⅝" RIVETS
¾" P.T. FOR WATER GAGE
⅝" RIVETS
9½"
7½"
EXPANDED VIEW.

46 REINFORCE PAD AS SHOWN IN DOTTED LINES FOR HANDHOLE OVER CROWN
51 " " " " "DOT & DASH" " H.H. FOR FUSIBLE PLUG & WATER GAG.



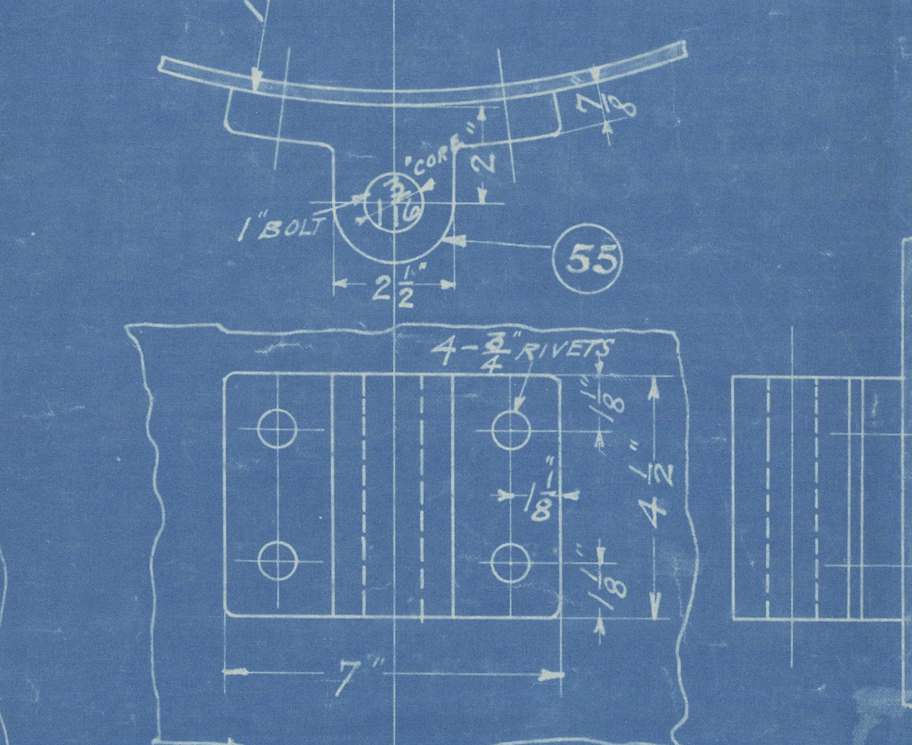
SHELL
2 5/16"
1¼"
1¼"
2⅝"
4⅝"
⅝" RIVETS
RIVETS
STAY
FLUSH RIVETED
7½"
11½"
EXPANDED VIEW.

45 REINFORCE PAD AS SHOWN IN FULL LINES FOR LOWER HAND HOLE
34 " " " " "DOT & DASH" " " " BLOW OFF
41 " " TO OTHER HAND IN DOT & DASH FOR " " " FEED.



3"
¾" P.T.
⅝" RIVETS 11/16 DRILLED HOLES
47
6"
9"
℄ OF BOILER

REINFORCE PAD EXPANDED.
BENT TO SUIT CURVE OF BOILER.



17⅝ RAD
1 BOLT
55
4-⅝ RIVETS
7"

Shi-Jay 7-15

79 2W 1
10 N 14

ENGINE DEPARTMENT
TITLE
AUXILIARY BOILER 2 FT 10 INSIDE DIA.
BY 6 FT 6" HIGH. 120 LBS PRESS.
SCALE 1½"-3"-6"-12" = 1 FT. DRAWN BY 223 DATE 6-JAN-12
TRACED BY 223 CHECKED BY 221 CHIEF DRAFTSMAN P.M.Y.
NEW YORK SHIPBUILDING COMPANY.
CAMDEN NEW JERSEY, U.S.A.
DR. # 125-641-1.
APPROVED J. L. Lovejoy CHIEF ENGINEER

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